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The Art and Science of Teaching Literacy: Empowering the Literacy Leaders of Tomorrow a Study of Pre-Service Teachers' Beliefs, Self-Efficacy, and Knowledge of Literacy Instruction

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COLLEGE OF EDUCATION

THE ART AND SCIENCE OF TEACHING LITERACY:

EMPOWERING THE LITERACY LEADERS OF TOMORROW

A STUDY OF PRE-SERVICE TEACHERS' BELIEFS, SELF-EFFICACY, AND

KNOWLEDGE OF LITERACY INSTRUCTION

By

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"Drops that gather one by one finally become a sea."

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ABSTRACT

The purpose of this experimental study was two-fold. The first purpose was to explore the levels of self-efficacy of pre-service teachers regarding their own reading and writing processes and their abilities to be effective literacy leaders. The second purpose was to implement two different interventions in literacy instruction for pre-service teachers: an innovative Reflections Interactive Notebook and a traditional Reader's Response Journal. The differences between outcomes of the two interventions were analyzed. Pre-service teachers from Florida State University (N =65) were randomly assigned from 3 beginning reading methods courses to receive a 6-week intervention utilizing the Reflections Interactive Notebook or Reader's Response Journals. Before intervention began, students were given a pre-test in the form of open-ended and Likert scale questions to determine their beliefs, self-efficacy, and knowledge of the content area of literacy. In addition to descriptive statistics for the open-ended portion of the survey, a Multivariate Analysis of Variance (MANOVA) was used to examine the effects of the two interventions. After determining a significant effect in MANOVA, Wilks's λ= .896, F $(3,124)$=4.811, p<. 01, η^2 = .104.   Between subjects and within subjects analysis revealed all the dependent variables were significant between the pre-and post tests: for belief scores: F $(3, 126)$=29.71, p<.01, η^2 = .414, for self-efficacy scores: F$(3,126)$= 16.62, p<.01, η^2 = .284, and for knowledge: F$(93,126)$, p<.01, η^2 = .240. Post hoc pairwise analyses for all three dependent variables were completed to determine differences between the two interventions (Reflections Interactive Notebook or Readers Response Journals) on the dependent variables of belief system, self-efficacy, and knowledge of literacy content. Results showed that the Reflections Interactive Notebook Group participants showed a number of positive differences in responding to their future literacy curriculum. It is speculated this could be due, in part, to the nature of the explicit instruction of research-based practice, along with the actual personal writings and practice of strategies that allowed for knowledge of literacy content and a strong belief system in creating and implementing literacy curriculum.

CHAPTER 1

Berliner (1987) writes, "No one I know denies the artistic component to teaching. I now think, however, that such artistry should be research based. I view medicine as an art, but I recognize that without its close ties to science it would be without success, status, or power in our society. Teaching, like medicine, is an art that also can be greatly enhanced by developing a close relationship to science" (p.4).

As Berliner writes, it is critical for those in the field of education to not only consider the art of teaching, but demonstrate knowledge of the current research in the field and come to realize that they, like doctors, are practitioners in a field that is based in science. This is more important than ever as we have entered the era of standards-based education, and there is a critical need to teach our aspiring teachers best practices that center on solid instruction in order to achieve optimal student outcomes.

Eight years ago, the Elementary and Secondary Act (ESEA), renamed the No Child Left Behind Act, vastly changed education in the United States. Even today with our current administration, President Obama is revisiting the 1965 "War on Poverty" reform in the reauthorization of The Elementary and Secondary Education Act. With both of these most current reforms, the focus has shifted to accountability by use of annual assessments (such as Florida's standardized test entitled FCAT), disaggregation of data to make sure teachers know the strength and weaknesses of all students, and articulation to parents and community members regarding student and school performance. The test, as does success in all academic domains, relies on the literacy skills of reading and writing.

As schools are now under mounting demands to increase standards, the hiring process for pre-service teachers has become more stringent. This pressure has been placed on higher education as professors are tasked with the essential job of evaluating what core knowledge and skills pre-service teachers need in order to be successful literacy leaders in a rapidly changing 21st century.

Few would argue the statement that literacy is the main ingredient to success in all domains of learning, and it should be a focus for teacher education programs. The

desire to achieve excellence in teaching is generally not an issue, as most new teachers feel they have been called to serve as role models and master teachers. Although educators attempt to provide their students with the best education possible, the students' outcomes are not always as positive as teachers hope. There have been few studies on reading and writing preparation for teachers, and the results show there are a wide variety of instructional practices that teacher educators use to foster literacy growth in pre-service teachers. Despite increased efforts, researchers in the area of education have not been able to determine what approaches work best for all areas of literacy achievement (Cowen, 2003; National Assessment of Educational Progress, 2004; NRP, 2000). One review of educational research revealed that not even 1 percent of dissertations in education or of the studies in ERIC abstract is experimental (Cook, 2001).

Just as Berliner mentions, teachers, just like practitioners in all fields, need to evaluate what we have learned about teacher education programs for literacy by first looking at the history of literacy and then defining literacy for the twenty-first century. In addition, researching the skills of competent readers, assessing current programs, and observing methods of exemplary teachers can help define the role of "literacy leaders" for the 21st century. It is also critical to reflect on shortcomings in teaching literacy and consider how new ideas can be generated in order to bring teacher education to new heights.

Although the best approaches to teaching literacy and preparing our teachers are unclear, at least there is some agreement regarding educating our pre-service teachers. Most importantly, more work needs to be conducted in order to determine how well instructional approaches are working to reach desired outcomes (Block, 2006; Guthrie, 2003; Pearson & Duke, 2003). Another point of agreement is that students will make use of comprehension processes only when teachers prompt them (Block & Mangieri, 2003; Block, Oakar & Hurt, 2002). And in one of the few empirical studies completed by McCutchen, Harry, et al., (2002), it was found there is a relationship between teachers' philosophical views, or belief systems, about literacy instruction, their disciplinary knowledge, and practices in the classroom (as cited in Cunningham, Zibulsky, Stanovich & Stanovich, 2009).

More than ever, researchers need to find clear answers to what works in literacy education and use these studies to improve teacher education programs. Although current research from the NRP, or National Reading Panel (2000), and the U.S. Department of Education (2002) has yet to have major influence over the way most teacher training programs instruct pre-service teachers in literacy (Joshi, Binks, Hougen, et al., 2009), it is felt research that works to make clear the relationships found between teachers' beliefs, knowledge, and practices could be the framework that would help to assist in the restructuring of these programs.

Literacy is coming to the forefront of the world of education academia because of many factors. First, the United States is seeing a major change in terms of diversity of people. The number of children from poverty-stricken homes and English Language Learner (ELL) backgrounds is projected to grow by leaps and bounds, indicating that future teachers are in greater need of methodology in differentiation of instruction as well as a firm background in explicit research-based literacy practices. The National Center for Educational Statistics projects an increase of 47% more Hispanic children from ages 5-13 living in the US between the years of 2000 and 2020 (as cited in Hoffman & Pearson, 2000).

Unfortunately, as the literature review of this study will reveal, there are not only cognitive but also social contexts of school that are embedded in the way we approach the teaching of literacy that allows for a vast inequality in literacy education for the changing population. One could say there is a national occurrence of "The Matthew Effect" on a grand scale, as those who are strong in literacy are becoming stronger, and those who are weak are becoming weaker (Stanovich, 1986).

Even more troubling is the question of who will teach these students. Aging of the teaching force, in addition to high attrition rates (nearly 30% quit teaching during their first 3 years), could lead to a vast teacher shortage (Darling-Hammond, 1999). Strong teacher education programs could be the key to attracting and obtaining a new, quality generation of pre-service teachers to the field.

Our society is one of a new media world. The use of electronic texts is posing challenges for many people who were once considered literate. In addition, teachers and students are now challenged to master a variety of literacies all within an era of

declining support (Heydon, Hibbert & Iannacci, 2006; Hoffman & Pearson, 2000; Myers, 1996). Defining literacy for the 21st century will help guide instruction, which will be relevant to students in today's society.

The History of Literacy and Educational Reform

Before considering literacy for the changing society, it is important to address educational reform and the debate about standards. Educational standards refer to a broad range of changes in curriculum content of kindergarten through 12th grade, the methods of how to assess students, and what will be required of teachers in terms of certification (Myers, 1996). As Myers points out, each of these reform efforts was actually part of a movement to create or re-conceptualize a form of literacy. When the definition of literacy changes, it is always followed by changes in other subject areas, proving literacy is at the center of all learning.

Even as far back as the first informal reform in the 1780's, which was led by Thomas Jefferson, there has always been different reasons for either the want or need of change in literacy and education. According to Myers (1996) there have been four shifts in literacy which include: (1) from orality to signature literacy (1660's-1776); (2) from signature to recitation (1776 to 1864); (3) from recitation literacy to decoding/analytic literacy (1864-1916) and (4) from decoding/analytic literacy to critical/transitional literacy (1916 to 1983). With each of these changes, occupations, citizenship, and personal growth were the driving forces. Our new nation once could adequately function using only oral language, as people were not transient, individuals raised their own food, exchanged for goods occurred face-to-face, and citizens stayed grounded in their communities.

Cohen's study (1982) details how literacy was once seen as a way to "control" other people because of the untrusting ties the newly-formed United States had with Great Britain (as cited in Myers, 1996). "A form of literacy authorized by the culture always gives benefits to those who have it and losses to those who don't" (Myers, 1996, p. xvii).   The practices of the newly arrived immigrants were much like those of Europe; citizens felt comfortable conducting business face-to-face with witnesses present. Even

though these years were marked by a mostly oral literacy, many of the educated were now beginning to have access to printed materials and began writing their signatures for trade and public records (Myers, 1996). These changes from the art of conversation to writing served the major aforementioned purposes of that time as people began to become much more transient.

What resonates during this time period is literacy was divided into different levels, depending on status in society. Cressy (1980) stated that the lowest level could possibly make the "X" for a signature, those of the middle class could write their names, and those of the highest level were individuals who could write their names and read and write a bit (as cited in Myers, 1996). At this point in American history, Clancy's research (1998) found that reading was an activity that included concentrating on small portions of text at a time (as cited in Myers, 1996). Only the college elite recited writings from books and lectures (Halloran, 1990).

Cremin (1961) argues the most important change between oral and signature literacy came when Horace Mann, secretary of the Massachusetts Board of Education, reported the need for the first national standards movement in terms of curriculum content (as cited in Myers, 1996). Mann felt in order to give all citizens equal access to the current economic system, literacy must be key. Mann agreed with Thomas Jefferson's statement that literacy was needed in order to preserve democracy.

The pedagogy of this period included teachers reading aloud to their students and using various handwriting systems. Literacy was a form of art. Even in the 1800's there was debate; the "educators" of that time argued whether handwriting should be taught as a product (analysis of letters) or a process (actual movement of the hand and arms). Handwriting was an important part of literacy as Nash (1969) argues that it became an indicator of just how intelligent one was, and it gave that person a venue for expression (as cited in Myers, 1996). There was a six-book reading series published by McGuffey (1836) and a book entitled The *Art of Writing* was published, which were signs of these times, as the content of the texts focused on alphabetic exercises and the beauty, or art, of writing (as cited in Myers,1996).

In the Recitation and Report Literacy Stage (1864-1916), the needs of Americans changed. The Civil War, urbanization, industrialization, and immigration all were factors

in a weakening of shared information among people. What was likely the largest difference between this stage and the Signature and Recording Stage was that no longer were students copying from books. As Brown's (1915) research revealed, educators moved more in the direction of dictating to students line by line, and correcting papers for mechanical errors such as spelling and punctuation (as cited in Myers, 1996). McDuffey's reading series took a different approach as the *New Eclectic Primer in Pronunciation Orthography* was published in 1879, focusing on not only oral expression and the art of handwriting, but also the correspondence between sound and alphabet (Myers, 1996).

In terms of schooling during this period, after the Civil War, there was a fear of disorder, so sorting by gender, ethnic groups, and achievement became the practice (Myers, 1996). Another way of sorting dealt with teachers actually forcing students out of public education. Thus began the social inequalities of which Tyack (1974) states, as the children who stayed in school were usually males, Caucasian, and from families who were affluent enough to buy their children books and other resources (as cited in Myers, 1996).

Halloran's study (1990) revealed that more writing was considered part of literacy as students began to copy essays in hopes of "imprinting" their minds with these different forms of writing. This was in keeping with the model of mind of John Locke's tabula rasa (wax tablet), as students learned through the senses, which is then imprinted on the mind, and then finally processed through similarity and repetition (as cited by Myers, 1996). Along with this came a change from religious to secular and from the elite to every person, for Locke claimed that all people can know (i.e. learn) from their readings (Myers, 1996).

With the idea of Locke's imprinting theory, assessment began to reveal itself in the form of recitation tests. In Resnick and Resnick's study (1977), the earliest recorded effort of this was made in the 1600's in a Swedish parish where religious selections were recited. Then, a later assessment appeared in England, which required students in grades one through five to recite a brief passage from a text, and grade 6 students were given passages from a narrative or newspaper. The United States followed suit in the form of the U.S. Immigration test and the spelling bee. Russell (1991) found in his

research that even colleges and universities required students to recite in front of large groups of students and professors, which many historians believe to be the arena that began the idea of recitation education. This literacy period was also marked with "art" as the art of public speaking was the crux of the curriculum (as cited in Myers, 1996).

As Tyrack's (1974) research revealed, at this time in history, the states in the U.S. began to use assessment data to make decisions on how many years students should attend school. By 1900, a minimum literacy standard of completion of early elementary grades was imposed as an indicator of literacy. Clifford (1984) reported at this time that school enrollment tripled due to the fact that many states required at least the minimum standard of literacy in order to obtain a job (as cited in Myers, 1996). Again, the needs of the people dictated the change in literacy in America. Although many completed the minimum of third grade, Tyrack (1974) pointed out that only the elite were afforded the opportunity to finish a high school education (as cited in Myers, 1996).

A shift in literacy came again, as the needs of the people changed. Because of the high numbers of enrollment in schools, the idea of abandoning the one-room classroom that was prevalent during this time was an idea that came from England in 1961. Although the classrooms were composed of large amounts of students, at least this alleviated some of the troubles educators had with teaching to different ages and achievement levels (Myers, 1996).

Also, the change in occupation types called for a higher level of literacy. Cremin (1961) and Tyrack (1974) both found in their research that employers were looking for citizens who could read new and unfamiliar text in order to be effective in the workforce. The recognition of nine school subjects in secondary schools were named by the National Education Associations' Committee of Ten, thus leading to a new curriculum— one that changed literacy greatly-- as recitation would no longer be the minimum standard. The Committee of Ten (1894) defined English as the following: (1) learning to express oneself clearly and; (2) learning to understand others (as cited in Myers, 1996). The primary goal of secondary education would be to prepare individuals for college. Since only the elite attended secondary school, this supports Myer's major argument that literacy reform benefits the elite, not everyone (as cited in Myers, 1996).

The next stage of literacy was one of Decoding, Defining, and Analyzing (1916-1983). This is possibly the one stage of literacy that resulted in the most change. Since historically many changes occurred in the United States during this time period, shifts also occurred in literacy, and debate of these became more intense (Myers, 1996). Centralization of cities and factories caused a need for individuals to be able to obtain meaning (comprehend) from unfamiliar text for the first time in our nation's history. Citizens needed to achieve a level of "basic reading" if part of a corporation, factory, or military.

There were major differences between this period of literacy called Decoding, Defining, and Analyzing (1916-1983) and its predecessor, Recitation. Students had to read pieces of text never seen before, teachers in order for students to be able to read for meaning and write responses now used questioning, and the first mass literacy test was given to military. This was an obvious shift to a new method of "teaching" and "testing" that started to permeate the country (Myers, 1996). This transition was difficult for students, as they were accustomed to reciting, not interpreting text. According to Kelly (1969), the most obvious dramatic difference in literacy in the 18th and 19th centuries was in the use of silent reading. Suddenly, the sound of recitation was no longer heard in classrooms, and silent reading, word attack skills, and sentence analysis took its place (as cited in Myers, 1996).

Tracking of students, or placing students by ability, became even more obvious during this period of change, as all students were to be basic readers, but those who were to attend college would be expected to analyze their readings. Those students who were "tracked" as vocational had to become informational readers, and the general population was expected to be able to successfully maneuver through text, finding such elements of reading as main idea and fact versus opinion (Myers, 1996). Wheelock (1992) found that the result of this tracking resulted in inequalities in race, social class, gender, and ethnicity, as different ways of reading were coupled with different reading materials. Prior to the 1960's, Myers (1996) notes that schools often took pride in the fact that students were unable to keep pace with the new standards of literacy, and a drop-out problem ensued. It wasn't until the 1960's that schools began to focus on keeping students in school throughout high school.

The role of oral speech and delivery, which had become an art form in literacy, became almost non-existent and looking at language in parts became the status quo. As Chomsky (1957) believed, there became a "language about language" that now included a new body of knowledge that required students to look at grammar three different ways: traditionally, structurally, and transformationally (as cited in Myers, 1996). Strang's (1942) studies concluded that an outcome of this change in viewing grammar was the realization that students needed to be "matched" with appropriate levels of reading. No longer were individuals just reciting words, true comprehension had to occur.

In terms of schooling, management occurred in a bureaucratic fashion, and this obviously led to changes in content. There was an increase in administrators in the school, as individuals such as Margaret Haley warned would take the expertise away from the teachers and give it to the administration. Haley, who helped establish the American Federation of Teachers, said,

> "The increased tendency toward 'factorization education' making the teacher an automation, a mere factory hand, whose duty it is to carry out mechanically and unquestionably the ideas and orders of those close with the authority of position, and who may or may not know the needs of the children and how to minister to them (Haley 1904; quoted in Tyack 1974, p. 257 as cited by Myers, 1996, p. 85).

This was the beginning of a concern that is still strong today, as educators and other interest groups believe the needs of the children need to be left to the educators.

This time in history seemed to be riddled with debate as different individuals viewed literacy reform differently based on their own needs. Some wanted a civic and social literacy that would strive to find solutions to social problems in a democratic way. Others felt personal growth should be the goal of literacy. Still others favored the factory-style of literacy, which eventually won out in the end (Myers, 1996).

Reading was also being separated from the fields of humanistic and literary studies, and it wasn't until the whole language movement until these ties were reconnected (Myers, 1996). This explains the differences in defining literacy that still exist today.

Writing continued to play a minor role in literacy as Sprat's study (1972) pointed to a writing model that called for conciseness. Students were to focus on efficiency of words, logical ideas, and lack of personalized style, or "voice" in writing (as cited in Myers, 1996).

Because of this new way of teaching and testing, such theorists such as Edward Thorndike argued that teaching of reading and writing should be focused around essential elements. As noted by Goodman et al. (1988), in Thorndike's book entitled *An Introduction to the Theory of Mental and Social Movement* (1904), Thorndike proposed teachers break down tasks into smaller parts, which was referred to as the Law of Readiness. In addition, he suggested teachers use frequent repetition in their teaching (Thorndike's Law of Exercise) and to give feedback to students in some form (Thorndike's Law of Effect). He stated that testing should occur in the same manner it was taught (Thorndike's Law of Identical Elements). These four laws were in perfect harmony with the factory-style form of literacy reform (Myers, 1996).

What Myers (1996) felt was learned from this period was the following: (1) changes in technology, the economy, and politics often drive reform; (2) new forms of language were discovered, as readers began to define the different aspects of reading and use different types of text; (3) this period is marked by most citizens needing to have a basic reading level was needed to be able to successfully read in their everyday lives; (4) reading and readers are historical and social constructions (this reminds us that there will be mismatches between readers and school literacy); (5) Finally, even though there were different forms of English for different classes, they can share a model of literacy. For example, some classes focused on the analysis of basic skills and some gave more attention to the analysis of literary form (Myers, 1996). At least both were looking at literacy as an object of analysis versus just recitation.

As change occurred, people felt that the old ways of decoding were not sufficient for the post-modern world. Factories were no longer able to keep pace and produce products that were needed. There was a transition to a new standard of literacy in the period that ran from 1960-1983 (Myers, 1996).

A Nation at Risk (1983) started a debate as this report alarmed the public by bringing to light the issue of American school children's poor standing internationally

and led to a call for standardized testing. In addition, as Wellborn (1982) found, there were reports in *US News & World Report* that stated although conventional illiteracy, the ability to read only simple text, had almost disappeared in our society, the ability to read and write at a level that is necessary to function successfully in society (or functional literacy) was decreasing.

Although citizens and policymakers were spearheading a call for action in terms of redefining literacy and applying new standards, studies by such researchers as Farr, Fay, and Negley (1978) showed that there were far more people achieving literacy in their reading between the period of 1940 and 1970 (as cited in Myers, 1996).

When considering redefining literacy, many people see it as a failing of the schools. In truth, as literacy levels grow, redefining the minimum standard changes. For example, for the first time in 1984, The National Assessment of Educational Progress (NAEP) noted that reading for different purposes requires different cognitive abilities (as cited in Myers, 1996). Also, giving different score levels for reading came into being at this point in history: rudimentary, basic, intermediate, adept, and advanced. Basic was the old way in the period of decoding. At this point, our nation, due to personal growth, occupations, and civic duties, redefined the term "literacy" once again.

In 1989, U.S. governors called for new standards in minimum literacies, stating that schools had not succeeded in teaching most students the traditional and basic literacy. The data on this shows the opposite to be true. During the period of 1940-1970, more and more people were achieving literal comprehension in their reading (Farr, Fay, & Negley, 1978). In 1982, the U.S. Bureau of the Census reported that 87% of adult Americans scored above the functional level of literacy (U.S. Department of Education, 1986).   In addition to this, by the 1980's, most states were reporting above-normal results on norm-referenced tests on decoding literacy in reading, and as Berliner (1992) reported, it was now taking a higher score to hit the fiftieth percentile than it had in the past.

Knowing this, then why were people pushing for reform? As in the past stages of literacy, jobs were changing and so was society. As people were becoming more literate, standards were being raised. In the 1930's, the Civilian Conservation Corps

defined literate as having three or more years of school. Fourth grade was the Army's definition of literate, and in the 1950's, the U.S. Census Bureau (1953) defined literacy as a sixth grade education. Stedman and Kaestle (1987) reported that it wasn't until the 1970's that some researchers were making the suggestion that twelfth grade was the minimum level for literacy.

The National Assessment of Educational Progress (in three assessments in 1981) reported that 72% of students aged seventeen could answer correctly comprehension questions that were literal, but that any type of problem solving or critical thinking strategies was not apparent (as cited in Myers, 1996). In a stunning study by Stedman and Kaestle (1987), it was found that many people who were working effectively in the workforce were unable to manage such tasks as Medicaid applications (as cited in Myers, 1996). Once again, people began to question what should be taught to students, and problem solving and critical thinking skills were now thought to be essential literacy skills.

With a study conducted by Resnick (1983) and the one conducted by Collins, Brown, and Newman (1989), it was found that metacognitive and cognitive skills are more important for survival in the workforce than low-level subskills or factual knowledge. What was proposed was a model of learning called "cognitive apprenticeship" which allowed for learning as an apprenticeship in "a collaborative process of negotiations and model fitting, not one of isolated skills" (as cited in Myers, 1996, p.111).

More debate was stemmed from this idea, as some felt this new method would fill the job market with overqualified workers, yet some individuals felt that the U.S. schools, factories and service companies were "dumbing down" jobs and education, which would lead to a society that cannot compete internationally. The dilemma was the restructuring of the workplace had not occurred on a wide scale. Some literacy programs introduced are still organized around the decoding/analytic skills of the past stage in literacy, while others are moving ahead to a culture of new translation/critical literacy and focusing on a new standard of literacy that involves what was found in Resnick's study (1987) to be essential: collaboration, critical thinking, tool usage, and problem solving (as cited in Myers, 1996).

In addition to the workplace, as Thomas Jefferson said so eloquently many years ago, literacy must be obtained for all in order to preserve democracy. Blackmur (1955) stated that in order for there to be democracy in the modern society, people must be able to interpret, critique, infer, and translate intentions of others' words, which is more vital than ever with the bombardment by the often untrustworthy form of communication of a free press.

As with every stage in literacy, in addition to occupations and citizenship, personal growth is a factor in how literacy is shaped in our culture (Myers, 1996). As Moynihan (1994) has suggested, the collapse of the American family is seen all around us. Thirty years ago, one in every 40 Caucasian children was born to an unmarried mother. Today, that figure is one out of every 5, and in some communities, 2 out of every 3. Our society is one that is lacking mentors, which, as Moynihan (1994) points out, is affecting people's personal growth. Teaching young people how to care for their younger siblings and even their elders could help solve a very real social need. As found by the longitudinal study of Snow, Porsche, Tabors, and Ross-Harris (2007), literacy is not enough to ensure success in schools. Students need emotional and academic support from parents and other adults in order to constitute what these researchers call "protective factors" for children (Snow, Porsche, Tabors, & Ross-Harris, 2007, p. 136). As our society and family culture dramatically changes, these protective factors need to be taught to children at a younger age.

Although the family structure issues are relatively new to our society, there are long-term, lingering problems of unequal education, and it is an issue that needs to be addressed, as ethnic minorities still are not receiving adequate levels of equity in education. As recently as 1993, an Alabama state court ruled that the school system was unconstitutional because it did not provide students with the opportunities to compete with students around the world or allow for adequate studies of their own cultural heritage (Alabama Coalition for Equity, Inc., et al. and Alabama Disabilities Advocacy Program, et al. v. Jim Folsom, Governor and as President of the State Board of Education; decision: June 9, 1993 by Eugene W. Reese, Circuit Judge). This, in addition to the growing numbers of immigrants as researched by Hoffman and Pearson (2000) must be considered when thinking about literacy and equal education for all.

With these changes in society, the emergence of translation/critical literacy as the literacy of public policy began to take shape after the decoding period was no longer adequate. What became profoundly obvious is that, as Myers (1996) states, "…various codes within events-based discourse have become ways to contribute to culture, to establish personal identify, to exert power and influence, and to get employment" (Myers, 1996, p. 121). Just being able to analyze, or decode, the parts of language from phoneme, to word, to sentence, is no longer adequate, but now people are called upon to use and observe language in different situated events.

On-the-job training has become the norm where explicit instruction is given. In this new society, Myers states, "…we find that people have institutionalized both learning-by-doing and learning-by-drawing-back-from-the-world for explicit instruction and practice" (Myers, 1996, p.121). The now complex structure of our society calls for more than learning by participating: citizens need to learn by explicit instruction, as well.

Defining an events-based discourse curriculum is done by Myers (1996) as he defines the different elements:

- A self who plays the role of writer/speaker encountering the question, "Who has the right to speak or write?"
- Tools which distribute problems and about which one asks, "How does this tool shape my thinking? Who gets access to tools?"
- An event-based language and text model about which one asks, "What code do I use to represent my thoughts? What are the parts of language?"
- An audience/reader about whom one asks, "What are the interpersonal relationships in the language? Who has the right to read or to listen?"
- A set of cognitive processes about which one asks, "What strategies are important?"
- A set of concepts about which one asks, "What are the relationships between texts and concepts? What topics are allowed or not allowed?" and
- A performance (book, speech, action) of consumption (reading or listening) or production (writing or speaking) about which one asks, "What is the purpose? How is the performance described in the classroom?" (Myers, 1996, p.122).

These definitions of events-based discourse make sense in today's society and are practical ways of looking at how to organize curriculum for literacy, but as with every literacy movement, there is debate. Moving from the decoding stage of literacy to this new translation/critical literacy stage has come with much resistance from parents. People that were taught during the decoding period and have jobs that revolve around this type of literacy are resistant to the translation/critical literacy. This works both ways, as parents who have jobs that are organized around the newer way, which includes more problem solving and information-processing, see decoding as not being sufficient for their children. Delpit (1986) noted that children who are at-risk are the ones who will be hurt by not having explicit instruction. The middle and upper classes have the means to provide explicit instruction either at home or through use of tutors (as cited in Myers, 1996), indicating the importance of explicit instruction for all, but the reality of not all students receiving it.

Myers (1996) suggestion is to link event-based discourse with the beliefs and differing attitudes of the wide diverse population we have in today's society. Thinking back to the oral literacy stage at the beginning of our nation, agriculture was mainly the sole occupation. In our society, with so many occupations, Myers suggests each of these occupations has a "code" which includes different ideas, cognitive strategies, and even different ways of relating in the workplace. Each of these different jobs has different assumptions about literacy, which teachers need to keep in mind when teaching. The professional field has obtained this new literacy, so if students are only taught through a literacy that focuses on decoding, the wheel of inequality will keep turning (Myers, 1996). Myers calls this new code the "code of power" (Myers, 1996). Unless *all* students are given the code, our levels of literacy will not improve.

When considering curriculum and methods of teaching, the work of Bernstein (1995) is a strong illustration of what is needed in literacy today. "Invisible pedagogy" activities require participation while "visible" pedagogy is instruction that is explicit. The case Bernstein makes refers to the British infant schools where invisible pedagogy was used to serve the interest of the middle class who were working in professional settings and had much flexibility in their jobs. This invisible pedagogy was used with these children at home, but the children of the factory workers had no such socialization and

were then left behind without having "visible" explicit instruction (as cited in Myers, 1996).

Cazden's (1995) research demonstrates that both participation and explicit instruction are present in successful schools. What Cazden states as the largest dilemma for teachers today is how to balance explicit instruction with a type of flexibility that allows for participation. Myers claims the best way to solve this is to look at the workplace. In the real world of work, there is a constant fluctuation between participation and explicit teaching. As Myers explains, the novice needs more explicit instruction, and all individuals in the workforce, from time to time, need this type of instruction, which is in line with the idea of scaffolding of instruction, the philosophy of Vygotsky (1978). But what is also needed is the participation that is a vital part of today's job market.

We are nearing the end of the first decade of the 21st century, just as with every other period in history, knowing that we have major differences in our society. What we need to consider is how to define literacy in terms of these differences in occupations, citizenship, and personal growth. As Myers (1996) states,

> "It is clear that the K-12 teachers of the United States are being asked to aim for a new standard of learning for all students and that this new standard, like others from the past, results from a convergence of new insights into texts, new models of learning, and new national needs—in this case, the new demands of contemporary economic problems and the workplace, the new demands of pluralism and diversity in our democracy, and the new demands for new supports for personal growth" (Myers, 1996, p. 117).

Looking at the past and moving forward to the type of instruction that Myers (1996) writes about is crucial in order to provide for effective literacy instruction in the 21st century. This experimental research study is designed to not only to consider current literacy reform but also to allow for reflection on what is needed to ensure pre-service teachers are prepared for the arduous task of teaching literacy. It will provide data by examining the results of two interventions: an innovative Reflections Interactive Notebook and Reader's Response Journal to assist with the teaching of literacy. Through investigation the use of these two interventions, pre-service teachers will learn

the knowledge needed in order to be literacy leaders and will provide them with the type of instruction that is based on research and is needed for our ever-changing world. This will allow for the development of a firm belief system regarding the teaching of literacy and strong self-efficacy of the pre-service teachers.

Research Questions and Hypothesis

After reviewing the literature and determining a comprehensive list of what is believed to be true in effective literacy instruction, the exploration of the two interventions (the Reflections Interactive Notebook and Reader's Response Journal) to assist in organizing these elements into a comprehensive "playbook" for pre-service teachers will allow for current research-based practices to be explored. In addition, the Reflections Interactive Notebook will allow for actual practice of personal writings and readings of the pre-service students, participation by use of discourse with other students, reflection of how this will best work in their classrooms, and feedback from the researcher on their own reading and writing will guide the pre-service teachers in best practices in literacy.

Research Question 1: What are the levels of self-efficacy of pre-service teachers regarding their own reading and writing processes?

Research Question 2: What is the self-efficacy level of pre-service teachers regarding their abilities to be effective literacy leaders?

Research Question 3: Do the explicit instruction techniques of Interactive Notebooks and Reader's Response Journals impact pre-service teachers differently in the areas of:

- ✓ Belief System
- ✓ Self-Efficacy
- ✓ Knowledge of Literacy Content

The null hypothesis is there is no difference between the Study Group who receives the treatment of the Reflections Interactive Notebook and those in a Reader's Response Journal Intervention Group (no notebooks) in terms of pedagogical

knowledge and beliefs, along with their self-efficacy in regards to their reading and writing skills or their perceived ability to be successful literacy leaders.

Research on the topic of the use of Interactive Notebooks has been extremely limited in the past. Interactive notebooks have been limited to mostly secondary science classes (Young, 2003; Stencel, 2001). The articles are written from the stance of teacher educators and are based on methods of how to implement these learning tools in the classroom-- not on how these notebooks relate to student outcomes or any research pertaining to the use of such a teaching tool for literacy instruction. Reviewing the literature on what makes for effective instruction in the classroom and allowing that to drive instruction in teacher education courses will allow the researcher to fill in the gaps of knowledge regarding usage of this type of learning tool. In addition, using the reading instruction courses at Florida State University as a sample of the population will allow research to be conducted on the effectiveness of this method of instruction in regards to building a knowledge base of how to teach literacy, establishing beliefs, and increasing self-efficacy for pre-service teachers.

CHAPTER 2
LITERATURE REVIEW

The first section of the literature review discusses the definition of literacy in the 21st Century, literacy for the 21st Century is defined. Section two is research regarding Teacher Education Programs, focusing on competent reader's skills and effective instruction, and research related to pre-service teachers, both past and present. The final section provides a detailed description of the current study.

There are many methods that have been used in the study of reading that include such designs as case studies, surveys, narratives, and quasi-experimental, yet there are few experimental studies in education (Cook, 2001). This is especially true regarding what works in educating our future teachers.   This experimental study will allow for the researcher to see the causal effects among pre-service teachers' knowledge, beliefs, and self-efficacy in teaching literacy by looking at past and present teacher literacy practices and applying researched-based best practices to the use of two interventions: the Reflections Interactive Notebook and the Reader's Response Journals.

Literacy for the 21st Century

According to Myers (1996), there are currently four different groups who support reform in standards. It is important to identify these groups and understand their motivations in order to fully recognize how current policy affects literacy education in the 21st century.

First, there are those who feel the public schools have failed, and there needs to be reorganization and clarity about goals. This group feels if this is not an option; if schools are failing, then students should be moved to private schools or a system of vouchers.

The second group of individuals believes that standards should return back to the ways of the late 19th century as decoding/analytic literacy was in place. These same individuals believe that focusing on differences, such as gender and ethnic diversity,

has been detrimental to schooling and wish for the more traditional standards of the past.

The third group is one that wishes to "protect" children's beliefs, feelings, and rights. This is a group that opposes certain forms of literacy. Like the second group, these individuals wish to return to the old traditional ways of teaching literacy and feel that how literacy and reform occur should be determined by the family, not the schools.

A large fourth group is one that wants to align the curriculum with recent developments in areas such as technology, language, and literature. New ways of discovering literacy is the goal of these individuals, and proponents of this wish to make schools' performances public. New ways of learning would be the ideal for this group, which is mostly made up of professionals.

The final group that Myers (1996) identifies is largely non-professional who advocate for movement based on social needs. Strengthening the economy and improving Americans' activities in citizenship is the drive behind these individuals, and they point to the large amounts of citizens not voting and the failure of the US to be able to compete in a world market as two major problems. Interestingly, as Myers (1996) points out, this group has major influence over various committees of Congress and is always there to outline what we need as a new standard of literacy.

In addition, what must be understood about the current views on literacy can be traced back not only through the different periods of literacy, but by the politics that coincided with those different periods. The inception of the 1965 Elementary and Secondary Education Act (ESEA) during the Johnson administration marked the first government involvement in reform of education. Although this started as a way to fight what Johnson coined the critical "War on Poverty" this initiated many beliefs and guidelines in education that are still seen today. Initially, ESEA administered funds to libraries, supplemental services, state departments of education, and research.

Then, when there were concerns regarding how funds were being spent and whether there was inequality based on race and socio-economic-status, Congress commissioned the Coleman Report to understand the extent of the problems (Hanna, 2005). This report found there were significant gaps between African Americans and Caucasians, despite similarities in curriculum, teachers' training, and salaries. In

addition, the report found what literacy education occurs prior to students' entrance into school plays a vital role in the literacy development of children.

Title I emerged from this first signing of the ESEA, which was meant to improve the academic environment for those disadvantaged. Although Title 1 has changed over the years, first being a pull-out program and then evolving into funding for a whole school program, it has remained a central and critical tenet of reform for schools (Hanna, 2005).

Presidents Carter (1978) and Clinton (1994) both reauthorized ESEA. Carter focused on the misuse of funds that had become a point of contention within the U.S., and the Clinton era saw the first signs of standards-based reform (Hanna, 2005). Goals 2000 called for alignment of resources around curriculum goals. The standards would set the goals, and then assessments would take place to measure a schools' attainment of these goals. What is important to note is the new Title 1 students would be held to the same standards as all students (Hanna, 2005).

With the election of President Bush came what many feel has been the most radical change in school reform, especially related to standards-based instruction, in the history of the United States. As Myers (1996) reiterated in his book *Changing Our Minds: Negotiating English and Literacy*, reform begins for three reasons: occupations, social needs, and personal growth. When Johnson signed the first ESEA into effect, the need was social, for there was a need to bring equality to education in a way that had not been in the past. As each President reauthorized the ESEA, these needs changed, and now instead of just determining who would attend what school and what resources would be allocated, dictation of what a student would learn within the walls of the school was now in the hands of the government (Hanna, 2005).

With this newly entitled version of the ESEA entitled No Child Left Behind (2001) came an extremely ambitious goal: all children will be proficient in reading and mathematics by the 2013-2014 school year. Accountability is the plan for reaching this goal. The framework for this new version of ESEA was the following: close the achievement gap with accountability, flexibility, parental choices (if schools do not meet their Annual Yearly Progress, or AYP), and research-based reforms (U.S. Department of Education, 2010). Again, debate began, as this required a vast amount of change

from previous initiatives due to the amount of control given the government in the decisions of individual schools and the assessments given in terms of fairness for all.

With the election of President Obama comes another proposed change. Eliminating the program title of No Child Left Behind, President Obama has provided a blueprint for priorities in his educational reform, which is now again being addressed as the Elementary and Secondary Education Act (ESEA). There are four areas of his reform plan which include: (1) improving principal and teacher effectiveness to allow for a great teacher in each classroom and a great leader in every school; (2) allowing for information that will provide understanding of how parents can assist their children's schools and educators can improve student outcomes in learning; (3) standards that are geared toward assisting each student to become college and career-ready, and developing assessments that align with these standards; (4) assisting the lowest-performing schools by providing effective interventions and support to allow for student achievement (U.S. Department of Education, 2010).

Based on the summary of the history of reform in America in Chapter One and considering the three reasons for literacy reform: occupations, social change, and personal growth, there are many questions that come to mind. How do we ensure we have great teachers and leaders in the classroom? How can we inform parents and help them guide children in learning at home? Who decides on these standards, and how can we ensure that literacy is not only an art, but also a science and is based on research? Which means, what interventions are scientifically proven to work for today's 21st century student?   How can we incorporate what has been shown by such researchers as Cowen who suggests a philosophical belief system that is a compilation and synthesis of the greatest reading researchers of our time (Cowen, 2003) while considering the politics of today and the needs that Myers (1996) speaks of as being critical in the form of an events-based curriculum? This is a vast undertaking, as in order to answer these questions, there is a critical need for bridging the aforementioned politics with practice that is researched- based in order to best prepare our future teachers for literacy of the 21st century.

Teacher Preparation Programs

Considering the past periods of literacy throughout the U.S. and the different interest groups involved in defining literacy is not only important when considering what this means for defining literacy in the 21st century, but it is also vital in how we can best prepare pre-service teachers in teacher education programs. As noted, because of the diverse population and changes in the types of jobs we have in the US, our role as citizens of our nation, and our social needs, literacy is more complex than ever. Myers reminds readers about the importance of literacy teachers who need to "become a kind of archeologist who recognizes the layers of past literacy practices in the classroom….and who recognizes that English and English language arts have been taught in our classrooms and in our society in many different ways" (Myers, 1996, p.5). This role of archeologist needs to be a legacy passed on to future teachers in order for them to be able to develop the knowledge base, belief system, and self-efficacy that are needed in order to provide for effective literacy instruction for each student.

Competent Readers' Skills and Exemplary Teaching

When reviewing the literature, there are abilities and skills that are generally considered critical to the success of learning how to read. Because of the extent of research in this area, the focus will be limited to three reliable sources: The NRP (2000), the findings of Snow et. al (2005) in the results of the National Academy of Education's Reading Subgroup, and the work of Cowen (2003).   The NRP limits the skills to specifically the five areas of reading: phonemic awareness, phonics, vocabulary, fluency, and comprehension, often referred to as the "Fab Five."

In Snow et al.'s work (2005), the authors cite the educational psychologist Scarborough who takes the "Fab Five" a step further as he creates a visual depiction of the many strands that are woven into skilled reading (Scarborough, 2001).   Snow et al. (2005) rely heavily on Scarborough's model (Figure 1) as a valid model from the view of integrating language and literacy so teachers can know about language. This allows for

the correct technical terminology that teachers and pre-service teachers need to know and learn, as well as to allow for the visual comprehension of the complexity of reading.
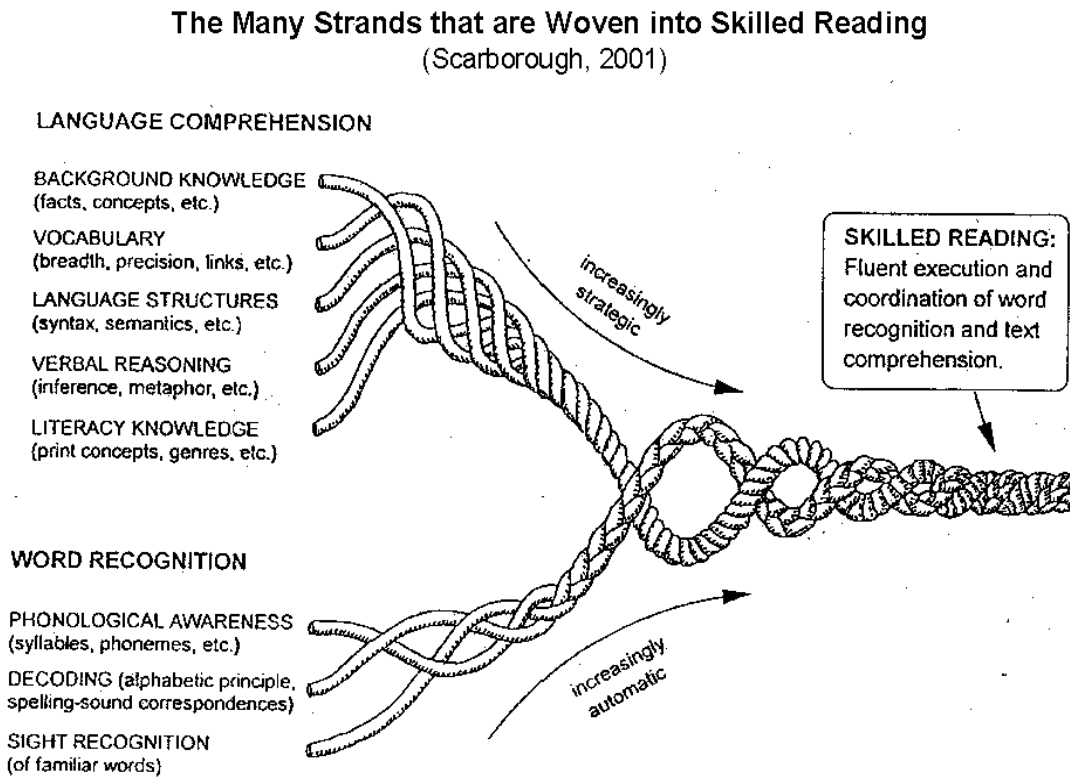
The Many Strands that are Woven into Skilled Reading
(Scarborough, 2001)

LANGUAGE COMPREHENSION

BACKGROUND KNOWLEDGE
(facts, concepts, etc.)

VOCABULARY
(breadth, precision, links, etc.)

LANGUAGE STRUCTURES
(syntax, semantics, etc.)

VERBAL REASONING
(inference, metaphor, etc.)

LITERACY KNOWLEDGE
(print concepts, genres, etc.)

increasingly strategic

SKILLED READING:
Fluent execution and coordination of word recognition and text comprehension.

WORD RECOGNITION

PHONOLOGICAL AWARENESS
(syllables, phonemes, etc.)

DECODING (alphabetic principle, spelling-sound correspondences)

SIGHT RECOGNITION
(of familiar words)

increasingly automatic

FIGURE 1. The Many Strands That Are Woven Into Skilled Reading (Scarborough, 2001)

In Cowen's (2003) recent work, we find the most comprehensive list regarding an effective reading program that stems from the research by the most renowned reading researchers both past and present. In order to best prepare pre-service teachers, these skills and abilities need to be researched-based and practiced by these novice teachers. Before considering these aforementioned models, the easiest approach is to define and view the research on what the NRP (2000) calls "The Fab Five" of reading. This will

allow for educators to have a basic understanding of the following reading terms: phonemic awareness, phonics, fluency, vocabulary, and comprehension.

Phonemic Awareness

Phonemic Awareness is defined as the understanding that words are made up of separate distinct sounds (NRP, 2000; Snow et al., 2005). Students should be able to manipulate these sounds in such tasks as segmenting, blending, and rhyming. The ability to complete these tasks auditorily is necessary in early learning and is one of the best predictors in early success in reading for children (NRP, 2000).

There are different belief systems regarding how these phonemic awareness skills should be taught. Teaching them in isolation is one way (NRP, 2000), while others believe there is greater success in teaching through reading and writing instruction (Adams, 1990; Snow et al., 2005). Cunningham (2007) firmly believes in use of repetition while mastering phonemic awareness, along with invented spelling, which allows students to start mapping graphemes (letters that are written) onto sound, even if they may not at first match during the initial stages.

In terms of research, there are results from prominent researchers such as Brady, Fowler, Stone, and Winbury (1994) that show teaching children phonological awareness skills positively affects reading, as there is a causal relationship between phonological awareness and early reading (as cited in Anthony & Lonigan, 2004). Anthony & Lonigan (2004) take this a step further, as they reanalyzed four sets of data that had been previously published to look at how to best conceptualize phonological awareness. What they found is that "phonological sensitivity" is a single ability that can be measured by a variety of tasks (e.g. detection, blending, and omission of sounds) that differ in linguistic complexity, such as syllables, rimes, onsets and phonemes (Anthony and Lonigan, 2004, p. 51).

In terms of best practices for teaching, what Anthony and Lonigan were able to accomplish was to use better methods of statistical analysis to compare previous studies (Anthony, et al., 2002; Schatschneider & Murray, 1999; Foorman, Fletcher & Metha, 1999; Stahl & Murray, 1994; Wagner et al., 1997) using more current statistical

analysis methods to determine what is more important: rhyme sensitivity or phonological sensitivity. They concluded that sensitivity to onsets and rimes, syllables, etc. need all be included in the teaching of phonemic awareness, and that it is the students' sensitivity to the sound structure of the language that is crucial in learning to read. One implication for teachers that Anthony & Lonnigan (2004) note is that through their studies, it is indeed possible to identify children at-risk for reading issues during the teaching of phonemic awareness and if disabilities are found, they can be remediated by use of activities that promote phonemic awareness.

We know indeed that phonemic awareness is one of the greatest indicators of reading success, so how does this reveal itself in the training of pre-service teachers? One of the most renowned researchers in the field of teacher education, Louisa Moats (2009), has been an advocate for the importance of teachers' knowledge about the written and phonological systems of English. Even today, current research revealed that if teachers have the knowledge base in the area of linguistic knowledge, there are positive effects on the outcome of students' reading performance.

One such study was completed by Foorman and Moats (2004) who researched the area of phonemic awareness and found the most comprehensive study completed by the NRP (2000). Phonemic awareness continues to be a highly debated topic in reading, yet correlational studies have shown this skill, along with letter knowledge, are the two best predictors of how well children learn to read (Foorman & Moats, 2004).

The NRP panel (2000) used a meta-analysis technique of comparing effect sizes from studies that were either quasi-experimental or experimental with a control group or a multiple-baseline method. For phonemic awareness, 1,962 studies were included, 52 of which were meta-analyses and 96 were used for instructional comparisons. The conclusion of this vast study was that phonemic awareness instruction is most effective when children can quickly move from oral language manipulation (such as rhyming) to the use of actual letters, and small group instruction is employed. When instruction is given, few activities should be given versus more to avoid for confusion. Conclusively, phonemic awareness instruction is critical for students' reading, writing, and spelling (NRP, 2000).

When examining the results of these studies, a value of .20 is considered a small effect size, .50 is moderate, and .80 is large. What the NRP (2000) examined was if phonemic awareness was really a sound practice for improving phonics, spelling, and reading. Taken into account was whether the studies were of random design, contained large or small samples, and if they met the rigor set up by Troia (1999) in order to evaluate and strengthen internal and external validity (as cited by NRP, 2000).

The overall effect size on phonemic awareness outcomes resulted in a large .86 effect size, and it did not decline significantly after training as given as seen by the effect size of .73. In terms of reading, .59 indicated a moderate effect (.45 at follow-up test), and finally, effect size for spelling was .59 (.37 and .20 after delayed post-tests). This proves that teaching children instruction that involves phonemic isolation, phonemic identity, phoneme categorization, blending, segmenting, and deleting is highly effective across the various literary areas. When children received explicit instruction presenting only one or two skills of phonemic awareness at a time, effect sizes were larger. This is important as an implication for teachers, as the effect sizes decreased when students and teachers took on 3 or more skills at a time. Also, teaching children in small groups resulted in larger result sizes.

To assist teachers, studies done by Foorman, Fletcher, & Francis (1999) found that the following tasks dealing with phonemic awareness could be placed on a continuum from easy to difficult:

- Identification of names of pictures that begin with the same sound
- Blending onset–rime units into real words
- Blending phonemes into real words
- Ability to remove or delete a phoneme from a word and being able to accurately say the new word
- Phoneme segmentation
- Phoneme blending of non-words

Of all the studies included in the NRP regarding phonemic awareness, one is particularly of interest. The Blackman et al. (1994) program of "Say it and Move it" involved teaching 10 teachers and their teaching assistants in phonemic awareness training. This involved children (in a low income, inner-city school) using tiles that they

manipulated as they pronounced phonemes in a word. After this segmenting occurred, the alphabetic principle began to be taught (matching graphemes with phonemes). A variety of games were used and Elkonin boxes were used to represent phonemes in three-phoneme words.

This study is in agreement with the NRP's findings (2000), as it allowed for small group instruction (4 or 5 children) for 15 to 20 minutes a day, 4 times a week. The control group in this study received traditional instruction (letter names and sounds). The results were impressive, as children in the treatment groups outperformed controls on phonemic awareness tasks with an effect size of 1.83, and training transferred to reading at a moderate effect size of .65. Spelling had a large effect size of .94. One very positive result of this study was that children of all types: those who were at-risk, disabled readers, various levels of SES, different grade levels (2nd through 6th) were assisted by explicit instruction in phonemic awareness.

The limitations of the study need to be mentioned. Although this report (NRP, 2000) revealed that less instructional time is better, it does not give reasons why. It is important to note that instructional decisions should be based on individual student's cases and situational factors. Further studies need to be conducted on exactly how phonemic awareness should be instructed, as a variety of programs such as the aforementioned "Say it and Move It" and variations of this methods are being used (as cited in NRP, 2000), especially in regards to motivation of students.

 Also, as in line with Troia's work (1999), random assignment is important in using experimental design for studies of this type, as are sample size and fidelity checks.

Phonic*s*

Decoding letters that represent sound and encoding, which is sounds represented by letters, is taught through phonics. There are different views about the teaching of phonics: those who believe in teaching these important skills in different ways in a systematic manner, analytically, and through use of onset-rimes, spelling and whole language.

These different methods of systematic phonics teach children to translate letters into sounds to form "real" words, and all have something in common; they are very planned and follow a sequential order. As Myers (1996) clearly indicates, politics and social changes are both reasons for this debate. Current advocates of explicit phonics instruction are prominent researchers such as Lyon, Fletcher, Torgeson, Shaywitz, and Chhabra (2004) and Snow et al., (2005), who firmly believe explicit instruction in such skills as blending and segmenting are vastly important for children to learn to read. This is now referred to as the systematic way to instruct students in phonics.

There is explicit instruction involved in analytic phonics as well, that also encourages a constructivist approach (Vygotsky, 1978). Students are taught to analyze letter-sound relationships and make deductions about other words, constructing their own knowledge about words. Learning through use of onset-rimes involves teach word families that allows for students to "manipulate" the onsets and rimes to create and learn new words.

The work that has been completed is seen as completed by Ehri and Robbins (1992), which yielded evidence that use of analogy can assist young children to learn to read. This is the idea that reading can be taught through a series of onsets (initial letters preceding the vowel in a word) and rimes (word families that follow the onset). The results of this research indicated that children have an easier time reading unfamiliar words when the new words share letter/sound correspondences. This allows for students to break words into manageable parts. The most critical result from this study is that teaching children through use of analogy can help them in reading.

Cunningham (1992) took this a step further by creating a method of "making words" through use of letter cards, focusing on one word family at a time. By manipulating the letters, the student uses prior knowledge to make new words, allowing for the student to construct his or her own knowledge.

Phonics through spelling is the principle of teaching children to simply change sounds into letters to create new words through writing. How these methods differ deals with how the teacher controls the vocabulary (NRP, 2000).

The final type of phonics instruction revolves around use of whole language programs that focus on reading and writing which is meaning-based. Phonics is not

taught systematically or explicitly using this method, but is taught embedded within the instruction (NRP, 2000).

There is a great debate about this, which continues to roar on since the 1960's and '70's as is congruent with Myers's (1996) work that spoke about different groups of people who were trained certain ways and were not accepting of new ideas. But as Chall (1967) coined this "The Great Debate," it is important to examine the research behind these theories and, most importantly, the classroom implications of the methods.

What Chall found was that systematic, explicit instruction leads to better student outcomes, and it seems that her findings have been echoed in many studies, such as by Adams (1990) and Balmuth (1982), just two of the most famous examples (as cited in NRP, 2000).

The NRP's report (2000) revealed that this systematic way of teaching phonics instruction shows significant benefits for students from kindergarten through 6th grade. Socioeconomic status was not a factor, as this instruction was helpful for all students. It was found this instruction has the greatest amount of power for students in kindergarten and first grade, and the best approach of teaching this is integrating phonics with phonemic awareness, comprehension, and fluency (NRP, 2000).

When reviewing the research on phonics instruction, one limitation that is worthy of note is that random assignment of students to treatment and control groups is not an easy task. School Board Approval committees and parental pressures do not make this type of research easy to conduct. Parents want the best possible education for their children, so those not in a treatment apply pressure to school systems, which makes school settings often resistant to the idea of experimental design (Cook, 2001), therefore, effect sizes are not given.

The NRP's (2000) work on phonics followed the same guidelines in terms of criteria for selecting studies as the phonemic awareness research. What is different about this portion of their work is they were coding for characteristics that were included as moderators. They looked at the type of phonics program, three specific programs, what was taught in the control group, how the groups were assigned (random or nonequivalent), grade levels (kindergarten, first, and then 2nd through 6th grades), reading abilities, SES, and how instruction was delivered (1:1 tutoring, whole class, or

small groups). Out of 75 studies screened, only 38 were used for the meta-analyses, (37 were eliminated) in order to calculate effect sizes.

When looking at the two different main approaches to teaching phonics (systematic versus nonsystematic), it was revealed in the NRP's report (2000) that the effect size was .44, a moderate result. This allowed for the conclusion that systematic phonics provided for better student outcomes than programs that were either unsystematic or completely null of phonics instruction.

When asking the question of what systematic program works best, the NRP (2000) looked at three: synthetic, analytic, and all other systematic phonics programs. What was found is that the effect sizes were as follows: synthetic (conversion of graphemes into phonemes and blending to form words) had an effect size of .45, for analytic, larger unit phonics, the effect was .34, and for miscellaneous systematic approaches .27. Because the effect sizes did not differ greatly, this would be an area of further research.

Also of importance is whether teaching students in small groups, by class, or on a 1:1 basis makes a difference in phonics instruction.   The NRP (2000) reported effect sizes ranged from .57 for 1:1, to .39 for class instruction, with small group falling in between at .43. These are not vastly different, which proves phonics instruction works in different settings, but is best 1:1.

Another major point of contention in terms of phonics instruction is when should phonics be taught? Instruction provided earlier is clearly the best time, as the NRP (2000) found that phonics instruction during kindergarten yielded an effect size of .56, first grade instruction was .54. These do not vary significantly, but when comparing to 2nd-6th grade, there is a difference, as it yielded only a .27 effect size. In combination with what was revealed about phonemic awareness (combining alphabet knowledge with sequence phonemic awareness instruction), phonics presented at the right development stage yields significant results.

The renowned and highly acclaimed work of Chall (1967) was instrumental in guiding researchers and educators to think about how to best teach phonics. Chall did not give specific answers to what type of instruction was best, just that it needs to be systematic and explicit. At the time of Chall's work, the other method of instruction was

what many called "Look-Say" (NRP, 2000). This method allowed for students to read words as whole and focus on gaining a vocabulary based on memorization of sight words. This is comparable to what became the whole language approach. And, as Myers mentioned (1996), controversy surrounding what he called the "Decoding/Analytic" period in history was both political and socially driven. People who were taught in the manner of "Look-Say" felt children should be taught the same way, no matter what the research had to say about the strong research-based findings of systematic phonics.

Although this debate still continues today, there are some researchers, such as Pressley (2006) who suggests using a range of strategies to teach phonics. Just as students are individuals, how they learn will vary, and it takes an exemplary teacher to be able to assess the student's way of learning best and apply it in order to supply individualized instruction to every student. This thought process is congruent with that of Ehri (1991, 1994) as she distinguishes between different ways to teach phonics:

- Decoding- converting letters into sounds; blending to form recognizable words, Knowledge of the alphabetic system; teaching of such difficult sounds as digraphs
- Sight- Memorization of words that don't follow the rules or area often seen in text
- Analogy- Using parts of words that students already know in order to read new words
- Prediction- Use of context clues; use of background knowledge

As the NRP (2000) reveals, reading will come easier to students when students use multiple means to reach the end of reading and can begin to read with automaticity. When thinking about the goal of reading, which is comprehension, phonics instruction had a .44 effect size in the meta-analysis of the NRP (2000), which is moderate.

One limitation of the research of the NRP (2000) deals with the need to study what specific teaching methods of systematic instruction work best. Some of the methods reviewed in the NRP (2000) report deal with Big Book Instruction (Holdaway, 1979) and the Jolly Phonics Program. Big Book instruction deals with work with letters.

This type of instruction is not systematic, as the teacher uses books to talk about letters, but there is no specific way to teach letter-sound relationships.

The Jolly Phonics program (Lloyd, 1993) is a program that is systematic and teaches students to learn the letter sounds, letter formation, blending for reading, and word identification for writing. It also contained instruction on words that are frequently used or "tricky" words (as cited in NRP, 2000). An innovative method of using hand gestures to help students remember letter-sound correspondence is used in Jolly Phonics (Lloyd, 1993), as "they make their fingers crawl up their arm portraying an ant as they chant the initial sound of "ant" associated with the letter a" (NRP 2000, p. 2-125). This idea of using mnemonic devices is supported in the research of Ehri, Deffner, and Wilce (1984) whose finding revealed that students learning letters in this way learned better than those just using letters and pictures.

Results from usage of these two programs (NRP 2000) found that the Jolly Phonics methods outperformed the Big Book unsystematic method. The effect size was found to be .73. A year later, the children were retested and again outperformed the control group in reading and spelling words, although no effect size was given by the NRP (2000).

What is clear is that systematic, explicit instruction is most effective and it is so at the start of schooling. The questions left unanswered are clear, as well. What are the actual techniques that work best with children regarding systematic explicit instruction? If students and teachers are motivated, will the student outcomes be stronger? Does the use of decodable text make a difference when teaching phonics? These are possible areas of research for educators as they explore and solidify what methods will yield the best results (NRP, 2000).

Fluency

Fluency, which is defined as rate and accuracy of reading, as well as prosody (expression) of reading, regained vast attention in the report of the NRP in 2000. The reader must first be able to recognize, or decode, the printed word, then be able to gather meaning of these words (comprehend). Rasinski (2007) noted that fluency,

which was once given vast attention, has now been relegated to being an area of reading that gets little attention (Rasinski, 2007).

In *What Research Has to Say about Fluency Instruction*, prominent researchers, which include S. Jay Samuels, Alan E. Farstrup, and Timothy Rasinski, noted that fluency is one of four key areas for which instruction in reading could profit from most. This skill is regarded as vastly important because those students who can read fluently (or with automaticity) are able to save their cognitive energy to reach the ultimate goal of reading: comprehension (NRP, 2000; Rasinski, 2007).

Rasinski believes there is a need for different types of fluency instruction. The teacher needs to model fluent reading, there needs to be support for students as they read, and attention needs to be given to meaningful phrasing while reading. Repeated readings need to occur frequently to allow for automaticity (Rasinski, 2003).

The National Reading Panel (2000) really, for the first time since the prior reports, placed an emphasis on fluency because there was a general consensus amongst researchers on the panel who felt it had not received enough attention. In addition, through their research it was revealed teachers often neglect this area of reading instruction, and it is critical for students to be fluent in their reading in order to be able to comprehend text. The NRP (2000) did find positive outcomes when teachers utilized guided and repeated oral readings, but there needs to be additional research in the area of teacher support.

A study by Pinnell et al. (1995) found that a sample of fourth grade students who were representative of a national population were disfluent. 44% of the students struggled with grade level text. This study also concluded that these students had such issues with decoding, that their cognitive abilities were spent on the actual decoding, thus leading to poor comprehension (as cited in NRP, 2000).

The NRP (2000) looked at two instructional approaches in their report to ascertain what works in instruction regarding fluency. First investigated was oral reading, which included such activities as radio reading, repeated, and paired reading. The other approach considered was independent reading. Sustained silent reading, the Accelerated Reader and other types of reading programs that revolved around

incentives (Shanahan, Wojchiehowski & Rubik, 1998) were the types of programs considered in the NRP's analysis.

The NRP (2000) used studies that were experimental in nature and refereed, covered grades kindergarten through grade 12, and were used in English language reading. There was a large set of data that the NRP felt was too immense, so using the same criteria as used with phonemic awareness and phonics, it was decided then to only include articles from the year 1990. Seventy-seven articles were coded for possible use in the final analysis concerning explicit instruction of fluency. What was found is that a weighted effect size of .41 was given in terms of how explicit fluency instruction affects reading achievement. It was also noted that this type of instruction was helpful for students of all grade levels. Unfortunately, though, a limitation of this meta-analysis was that it only included studies containing small treatment sizes.

When looking at how fluency interventions affect reading outcomes, it was found that in terms of reading accuracy, the effect size was .55. Reading comprehension yielded an effect size of .35, and fluency .44. When these measures were aggregated, the effect size was .50, which proves fluency instruction is valuable.

In terms of independent reading, most of the studies failed to show positive relationships for promoting this type of literacy. One valid reason for this is the NRP (2000) stated the studies were weak, as they failed to monitor the amount of reading of students.

The NRP (2000) does correctly ascertain that further study needs to be completed in this area of reading, for there are gaps in the knowledge. For instance, longer time spans need to be given to experimental studies, as well as looking at how different methods work in terms of student outcomes. As educators reveal, motivation is a large part of reading and there is no mention in this report of how giving students choice in reading makes a difference in outcomes.

Research in addition to the NRP report started as early as the 1800's as James (1890) revealed the importance of practice and repetition for skill development. Huey's (1905) renowned work summarized findings on word recognition as it relates to eye movements while reading, and his analogy of word recognition as a skill like tennis seems valid as he talks about repetition of an act, practice and time, and finally a skill

that occurs automatically without attention to details. His theory would allow for the type of automaticity that would allow students to spend their cognitive energies on comprehension.

Later during the time of "Behaviorism" very little fluency research was conducted (from about 1910-1950's), but the 1970's idea of reading as a cognitive, psychological process and studies by Posner and Snyder (1975) regarding letter recognition came back into the educational research arena. Reading as a process was being defined by such people as Fries (1962) and the still noted work of LaBerge and Samuels (1974) who clearly stated that word recognition is vital to reading comprehension. In addition, the respected work of Stanovich (1990) spoke of cognitive efforts in decoding that could take away from a student's ability to comprehend (as cited in NRP, 2000).

There are many methods that can be used to help teachers assess if a student is a fluent reader. Clay's (1972) use of running records allows for teachers to "run alongside the reader" as the student is reading orally and note any miscues, or errors, in their reading. This relates to the areas of graphophonics, semantics, and syntax that students use in reading text. Other researchers have developed such measures as reading speed calculations (Hasboruck & Tindal, 1992) and miscue analysis (Goodman & Burke, 1972), all of which the NRP (2000) notes in their report.

Although the NRP (2000) concludes that little time and weak studies have been conducted in the area of fluency, such researchers as Juel (1988) and Taylor et al., (1999) both found that exposure to print is vital to students achieving the automaticity needed to be skilled readers. Juel (1988) discovered the students who had excellent word recognition had twice as much exposure to words than their counterparts in first grade. Taylor et al. (1999) concluded that high achieving elementary classrooms gave students more time for independent reading, which the NRP (2000) did not seem to think was a conclusive point in their study. The limitations of current research deal with the fact that giving time for reading has very little cited research-based studies where there are control groups and treatment groups. There is a gap in the research between different forms of reading instruction and how much students are actually reading.

Noting that the explicit instruction in fluency yielded positive outcomes and has had the most research completed, it is important to note that along with explicit instruction in phonemic awareness and phonics, fluency instruction with explicit assistance from the teacher (such as teaching students how to phrase in reading, read with prosody, and modeling of reading), as well as teachers giving feedback or guidance in readings has yielded positive results. Taylor, Wade, & Yekovich (1985) along with studies by Pany and McCoy (1988) both conclusively reveal that explicit instruction, feedback, and guidance from the teacher is crucial to the students' understanding of fluent reading (as cited in NRP, 2000). A word of caution is given by the NRP, though, as too much attention to this could lead to issues with comprehension. What is needed is explicit instruction in all areas of reading that includes a balanced approach.

Vocabulary

Vocabulary is an area of reading the NRP (2000) notes is extremely lacking in terms of research. The suggestion of the NRP is to teach vocabulary using direct and indirect instruction and include exposure to words multiple times using words in context. The NRP (2000) found that a single type of vocabulary instruction method would not result in the best type of learning, but that vocabulary instruction should be engaging.

The NRP (2000) gives credit to Davis (1942) for the research presented which notes that comprehension is made up of two skills: reasoning in reading and vocabulary (knowledge of words). The panel acknowledges Davis's view by including the current research on vocabulary with the other comprehension research. There are questions about the "skills" that make up vocabulary instruction; what is not argued is the strong relationship between vocabulary and comprehension. There is a relationship between vocabulary size and reading ability, but that causal link between increasing vocabulary and increasing comprehension has not yet be determined (NRP, 2000).

When conducting research for the report, the NRP used the aforementioned criteria used for the areas of reading, and studies were limited to experimental, along with three meta-analyses by Stahl and Fairbanks (1986), Klesius and Searles (1990),

Fukkink and de Glopper, (1998) and two literature reviews on instruction in vocabulary by Nagy and Scott (in press), and Blanchowicz and Fisher (in press).

The criteria used for evaluation, along with the use of the meta-analysis and literature reviews provided 50 studies that were potential candidates for analysis. What was found was quite startling: none of the studies explicitly addressed the measurement of vocabulary. A gap in knowledge and a need for further research was found.

When constructing a formal meta-analysis, the NRP (2000) conducted an inspection that allowed for synthesis and revealed certain themes in vocabulary instruction. What was revealed were similar methodologies, concepts, and implementation of vocabulary instruction. Due to the lack of research, the NRP committee organized a database of vocabulary instruction. Although the NRP does not give effect sizes for vocabulary studies due to the lack of experimental data of vocabulary measurement, the end result is a descriptive organization of a database.

As with the other areas of reading, focusing on explicit versus implicit instruction is a major debate. The studies of Tomeson & Aarnoute (1998) and White, Graves and Slater (1990) revealed explicit instruction to be highly effective. These studies revealed that the more connections a student can make with a specific word, the better the word will be retained and used. Making connections with other readings and in oral language was mentioned from the NRP's (2000) study to have "large" effects, but the effect size was not given.

Looking at evidence outside the NRP (2000) study, renowned researchers such as Beck and McKeown (1991) state that vocabulary should involve allowing students to establish relationships between concepts and should allow for expansion of knowledge of individual words.

The work of Stahl (2003) allows for educators to think about vocabulary in different ways. Words change in different settings, so educators need to think about vocabulary instruction in terms of "contextual knowledge," not just definitions. Use of graphic organizers, word play, clustering techniques, puzzles, and other word games have been discussed by researchers such as Blackhowicz and Fisher (2007). Use of mnemonic strategies can really help struggling students and those with disabilities, as

well as all children. There have been many prominent researchers in the area of vocabulary (Anderson, 2004; Hirsch, 2003; Snow, Porche, Tabors, & Harris, 2007) and the previously mentioned Stahl (2007).

The synthesis of this research reveals what has already been noted, but it also adds a few valid points. Direct and indirect instruction, multiple exposures to vocabulary, rich contexts in which to learn, pre-instruction in words before reading, and re-teaching based on students' understandings are all important.   Again, what can be gleaned from these studies is "balance." The expert teacher knows his or her students and knows what will help make literacy a successful experience and can implement a strong reading program that allows for exploration of words.

Although research was limited before 2000, currently, such researchers as Wasik and Bond (2001) are conducting experimental research in the area of vocabulary. As stated by the NRP (2000) vocabulary instruction must be engaging. Wasik and Bond (2001) used interactive book readings to assist low-income children with vocabulary. Open-ended questioning techniques were used to engage children and learn vocabulary using authentic text within context. Based on the current research of Karweit and Wasik (1996), which revealed that teachers' questioning styles have an effect on children's development of vocabulary, Wasik and Bond (2001) used this method with 127 four-year-old children in a learning center located in Baltimore, Maryland. Half the teachers were assigned to the control group and the remaining were involved with the treatment. The researchers were trying to determine if teachers who were in the experimental group and used the techniques fared better in deliverance of vocabulary instruction than the treatment group.

The training for the treatment group involved the following: (1) explicit instruction on how to ask open-ended questions; (2) teachers allowing for opportunities for students to talk and be heard by their peers and teacher; (3) explicitly defining vocabulary words through use of authentic text readings and giving students opportunities to use those words.

When reporting classroom observations, ANOVA was conducted for the activities used. There were significant main effects of group (treatment vs. control) and word for each activity, as well as significant group X word interactions: $F (9, 54)= 17.02$, $p< .001$

and F (9, 54)= 26.39, p< .001. The teachers in the intervention group were found to use the target words much more frequently through the discussions and interactions with books. It was also found that the intervention did have an effect on teacher behaviors, specifically in terms of the extent to which teachers used and elaborated on the target words.

What appears to be a consensus among these different reports and studies is that vocabulary should be taught directly and indirectly, and it should be engaging using authentic texts (rich contexts). Repetition and multiple exposures are vital for positive student outcomes.

Comprehension

The main goal of reading is comprehension. The NRP (2000) defines comprehension as a cognitive process that calls upon complex skills in order to be successful. Although the NRP gives a working definition of comprehension, many researchers have worked tirelessly to examine how competent readers comprehend text.

In the 1970's, an important change came in the form of how researchers viewed reading comprehension. Once thought of as passive, now discussions of engagement, construction of meaning, interactions between text and reader, and prior knowledge became the theory of the time (Durkin, 1993). Reasoning strategically was thought to be the best way to teach students to comprehend, along with teachers' use of explicit instruction in using specific cognitive strategies (Durkin, 1979).

Mier (1984) found that by involving students in their own learning prevents passivity. Explicit instruction in the use of cognitive strategies must include the students' own awareness of their cognitive processes which will facilitate learning, a teacher who models and guides students through comprehension processes, and finally, a gradual release of the teacher to allow for independent successful reading (Palinscar & Brown, 1984; Pressley et al., 1994).

The issues in education in this type of comprehension instruction are that little time is spent by teachers offering the aforementioned direction for students.   The highly cited observational studies of Durkin (1979) showed that only 20 minutes of

comprehension instruction was observed out of a total 4,469 minutes of reading instruction in a grade 4 study.

The NRP (2000) emphasizes explicit and direct instruction as essential to literacy instruction, especially in terms of comprehension (Biancarosa & Snow, 2004). Researchers have found that too often when students learn how to decode words, educators feel reading is a done deal, and instruction ends (Durkin, 1979, 1981; Pressley, 1998).   The NRP reviewed the research and found that comprehension strategies are critical for students. Generating and answering questions, summarizing, using graphic organizers, and multiple strategy use are all found to be important. In addition, students need to be able to determine which strategy is most appropriate for the reading of different text.

Pressley et al., (2007) surpasses the NRP's (2000) list by including the role of the teacher in supporting the students. He emphasizes that students need to be active while reading, and teachers need to model and be explicit in the teaching of comprehension strategies. Students need to use text structure to help with comprehension, monitor reading to check for meaning, predict and adjust predictions as needed, understand story grammar, make connections to text, self, and world, be able to summarize the text, and reflect on what was read (Pressley, 2007).

The limitations of the NRP's (2000) study are time and resource limitations. Only literature was reviewed that pertained to normal reading conditions, not for disabled or struggling readers. In addition, the structure of the study on comprehension was different than the others, as it looked at methodology, results and discussions of findings, implications for reading instruction, and directions for future research.

Studies by the NRP (2000) used an article base of 205 studies, still based on their aforementioned scientific review criteria. The committee organized the type of instruction into 16 categories (Table 1). Out of these, the panel found seven to be of research-based quality. These include: comprehension monitoring, cooperative learning, graphic and semantic organizers, question answering, question generation, and summarization.

TABLE 1.   Categories of Comprehension Instruction, NRP (2000)

TYPE OF INSTRUCTION	# of STUDIES	WHY INSTRUCT?	HOW EFFECTIVE?
Comprehension Monitoring	22	Readers do not show comprehension strategy awareness	Readers learn to monitor how well they comprehend
Cooperative Learning	10	Learn to work in groups, help one another problem solve, listen and understand peers	Readers learn to focus/ discuss reading materials; Do better on comprehension tests.; Teachers provide modeling
Curriculum	8	Strategies should be taught through all content areas	Improvement in reading and academic achievement
Graphic Organizer	11	Readers do not use organizational aids to assist in comprehension	Improved memory and comprehension of text
Listening Actively	4	Ineffective listening	Improved memory and comprehension of text

TYPE OF INSTRUCTION	# of STUDIES	WHY INSTRUCT?	HOW EFFECTIVE?
Mnemonic	2	Pictorial aids not available, keywords help readers learn	Improved memory and comprehension of text
Mental Imagery	7	Readers do not use imagery	Improved memory & comprehension of text
Multiple Strategies	38	Readers need to learn to coordinate several strategies in order to construct meaning from text	Improvement in reading and academic achievement
Prior Knowledge	14	Readers may not have relevant knowledge during reading	Improved memory and comprehension of text
Question Generation	27	Readers do not know how to generate questions or make inferences	Readers learn to generate and answer inferential questions
Psycholinguistics		Readers may lack relevant knowledge about language	Readers learn to identify antecedents of pronouns

TYPE OF INSTRUCTION	# of STUDIES	WHY INSTRUCT?	HOW EFFECTIVE?
Question Answering	17	Readers do not know how to ask questions or make inferences	Improve answering questions
Story Structure	17	Readers cannot identify structure	Improved memory and identification of story structure
Teacher Preparation	6	Teachers do not ordinarily use effective transactional strategies	Teachers learn strategies to improve comprehension
Vocabulary-Comprehension relationship	3	Reading comprehension depends upon word knowledge	Learn word meanings and improve comprehension

One of the interesting points about the NRP's studies (2000) is that for each of the categories of comprehension instruction, it is noted that the best instruction is multiple strategy instruction. This allows for students to recognize that use of one strategy during reading is not sufficient for reading, as Allington reminds us that one size does not fit all in reading of different types and levels of text (Cunningham & Allington, 2003).

Rosenshine and Meister (1994) completed a meta-analysis of 16 reciprocal teaching studies from grades 3 through 7, and the NRP (2000) reviewed 11 more studies. As Rosenshine, Meister, and Chapman articulate, "The data suggests that students at all skill levels benefit from being taught these [explicit] strategies" (Rosenshine, Meister, & Chapman, 1996, p. 201).

One example of using the comprehension instruction strategies is the method teacher modeling in which the teacher actually orally demonstrates how he or she uses strategies to understand the text. The strategies of question generation, prediction, clarification, and summarization showed the strongest effects. Reciprocal teaching treatment showed near transfer. Experiment tests in ten studies had an overall average effect size of .88. In terms of general transfer in nine of the studies, the average effect size was .32, and results showed that stronger students in reading benefitted more than weaker students.

This method of modeling is consistent with Vygotsky's (1978) theory of socially mediated learning. This theory holds true for comprehension instruction, as, according to Vygotsky, cognitive development results from a process whereby a child learns through problem-solving experiences shared and discussed with someone else, usually a parent or teacher but sometimes a peer. Using these multiple strategies with support from the teacher allows for active involvement of the students that will lead to more reading of text. Rosenshine and Meister (2004) noted improvement was seen when teachers even used this type of instruction inconsistently. Block (1993) and Brown et al. (1996) found with more intensive instruction, improvement has been successful in student outcomes for standardized test scores (as cited in NRP, 2000).

The NRP (2000) and many renowned researchers agree on several points regarding comprehension. What is needed is more information on how to instruct teachers to use these proven strategies. Pressley (1998) found in a year-long observation of ten grade four and five classrooms that most classrooms were using the explicit comprehension instruction rarely, and despite the increased amount of research in the past two decades, there was very little change in teaching comprehension even though these are researched-based practices.

Also, further studies need to be completed on what ages would benefit from this type of instruction, and what type of effect would be seen using these methods within different text genres and across the content areas. There is a need to observe, document, and analyze this type of instruction using true experimental studies. Very few of the NRP's discussion (2000) had actual effect sizes listed for the individual strategies. As earlier noted, studies in education are not mostly of the randomized, experimental nature. There is agreement in the area of reading that this type of research is needed.

What about Writing, Speaking, and Critical Thinking?

The gap in what is seen in the NRP (2000) is addressed in the current publication entitled *Time to Act: Final Report from Carnegie Corporation of New York's Council for Advancing Literacy for College and Career Success* (2010). The Council Members include some of the most prominent reading researchers and professors in the United States, including aforementioned Biancarosa and Snow. This relates to the model (Figure 1) that Scarborough (2001) presented which includes the "Fab Five" of reading, but also includes areas that were not addressed in detail by the NRP (2000). These skills are writing, speaking and listening, and critical thinking.

Foorman and Moats (2004) reviewed the evidence of the best reading instruction practices that were from several of the most highly regarded reports in the reading community: The National Research Council (Snow, Griffin & Burns, 1998) *Preventing Reading Difficulties in Young Children* (1999) and the National Reading Panel (2000). They also included their current research, and what was found is in agreement with the research of Snow, Griffin & Burns (1998) that "instruction that builds on oral language to develop vocabulary, comprehension, phonemic awareness and alphabetic coding, fluency in word recognition and text processing, spelling and writing is more effective than instruction that does not include or integrate these critical elements" (Snow, et al. 1998). One aspect of literacy new to these critical elements was standards for writing even at the kindergarten through third grade.

Writing can and should be used as a tool for comprehension assessment. When students use writing and reading in conjunction, comprehension strategies improve (Commander & Smith, 1996; El-Hindi, 1997; McCrindle & Christensen, 1995). Tierney and Shanahan (1991) also researched the idea that writing can improve critical thinking. A meta-analysis of literature on writing instruction provided a list of eleven instructional practices found effective in improving the quality of writing, especially among adolescents (Bangert-Drowns et al., 2004; Hillocks, 1985).   These instructional practices include:

- Teaching students writing strategies for writing

- Teaching approaches to writing summaries

- Collaborative writing

- Being specific about product goals

- Word processing

- Sentence combining

- Pre-writing activities

- Inquiry-centered activities

- The process writing approach to writing instruction

- The study of model writing

- Writing to learn

Writing should occur daily and encompass a wide range of tasks. Students should have a predictable routine that will allow for reflection and revision, along with teachers who model strategies and writing (Graham & Harris, 2002; Troia & Graham, 2003).

When considering how speaking and listening play a role in literacy instruction, the Carnegie Report reminds us that oral language has a minor role in literacy

compared to other skills as children age. Even though these skills are not being fostered as much in instruction today, employers and post-secondary educators list these skills as crucial (American Diploma Project, 2004). Research has shown that students who engage in these skills have greater literacy success in later grades (Davidson, Kline & Snow, 1986; Scarborough, 2001; Snow, 1990).

When reviewing the NRP (2000) data on the areas of reading and the suggested literacy programs that work best, it seems the most comprehensive list regarding an effective literacy program stems from research by Freppon and Dahl (1998), Pressley (2000), Snow, Burns, and Griffin (1998), Fontas and Pinnell (1996), McIntyre and Pressley (as cited in Freppon & Dahl, 1998) in conjunction with Vygotsky (1978) and Clay (1991). These studies all were fair predictions of what an effective literacy program should resemble in today's world. Cowen (in press) discusses how we too often look for a "list" to check off in terms of what makes for a strong literacy program. Instead, based on the work of her aforementioned predecessors, a philosophical belief system involving 15 essential elements is suggested (Cowen, 2003):

- Authentic real literature that provides students with opportunities to read and enjoy a variety of genres (including multicultural resources)
- A comprehensive writing-process program that engages students in daily writing, peer editing, and publishing activities
- An integrated language arts and phonics skills-development approach that requires skills to be explicitly taught from the context of real literature, as well as from student writing
- Attention to the three cueing systems (graphophonics, syntax, and semantics), allowing for students to read texts meaningfully and with understanding
- Meta-cognitive, self-monitoring, fix-up and scaffolding strategies to support students in word recognition and reading comprehension
- Opportunities to develop learning strategies to use in new situations and to develop higher order thinking skills

- Ongoing assessment for continuous progress that engages students at the independent or instructional level and avoids materials at their frustration level
- Oral storytelling and other listening activities
- An interdisciplinary content area reading approach, stressing the use of a wide variety of trade books as well as textbooks
- Shared reading, explicitly modeled and guided reading, independent reading, and one-on-one instruction, particularly for struggling readers
- Time commitment to on-task reading and writing activities
- Reading/writing centers for exploration and discovery in all areas of the language arts and for managing individual and differentiated instruction
- Language-rich environment
- A supportive, nurturing classroom that meets the needs of all students and promotes listening, speaking, reading, writing, and viewing as joyful experiences
- Ongoing family involvement in children's literacy development

This comprehensive belief system coincides with what Myers (1996) and other renowned researchers both past and present have proven to be the important skills needed for students to become literate in the 21st century, and would serve well as the guiding belief system to assist schools in preparing pre-service teachers.

Putting it all Together: Teaching the Teachers

A section of the NRP (2000) is dedicated just to teacher education in literacy practices. The three questions that structured the research of the NRP were as follows: (1) how are teachers taught to teach literacy? (2) what are studies revealing about the effectiveness of teacher education programs?; and (3) how can research guide teacher education to allow for improvements? Many questions began to evolve as the NRP (2000) began compiling the report. How long should teacher education programs be? How do we assess pre-service teachers? What is the ideal experience that should be given to each aspiring teacher?

Immediately noted in the introduction to the NRP (2000) report was that there was a lack of research found that reveals the relationship between the development of standards and teacher education. Given the realities of the standards-based reform, this is a major gap in knowledge in terms of not only pre-service education, but also professional development for teachers already in the classroom. Reading research in the area of instruction involves teachers, students, tasks, and materials (NRP, 2000). The NRP found the research *not* to be focused on these areas.

Although there are accreditation processes, what the NRP (2000) feels needs to occur is standards need to be based on empirical research. In fact, this subsection of the NRP report was the one that most often mentioned concern. The majority of work that has been completed on teacher education has revolved around literature of literacy, not on researched-based evidence. These studies do not provide enough detail that is necessary in order to determine what variables explain causal relationships.

Because of the lack of empirical evidence, the NRP (2000) found 300 papers on the topic of teacher education, but could not use most due to their lack of empirical data. Instead, recent reviews from such renowned reading researchers as Anders, Hoffman, and Duffy (2000) were reviewed and only 11 studies followed the NRP guidelines. Even two of these 11 were regarding the same research project. The articles were, in addition to lacking concrete statistics, quite varied in nature, so a meta-analysis by the NRP panel was not felt appropriate. Instead, the NRP (2000) decided to provide comprehensive summaries, still utilizing the aforementioned NRP guidelines.

What is noteworthy from the NRP's (2000) work is that the focus of these studies is almost exclusively on student outcomes. What needs to be taken into account is what types of changes are seen in the pre-service teachers' behaviors. The NRP (2000) cites that one good reason teacher education has been ignored is the emphasis that is placed on student outcomes based on a particular intervention: not the teacher who is actually delivering the instruction. Most of the studies reviewed were regarding teacher knowledge, and of these ten, two reported only modest effects. There was not one study that even looked at changes in the format of instruction for teacher education programs. Although the NRP Panel claims that interventions in teacher education can lead to an improvement of teaching, the limitations are clearly stated: there is not

enough research-based evidence to give credence to any one idea to determine what instruction works in teacher education.

The NRP reminds readers that teacher attitudes do change as a result of intervention, and without this change in attitude, there is little chance of change in instruction and student outcomes. No effect sizes were given for credibility of this statement, and the NRP admits it is the one area that has the most significant gaps in the report. Again, limitations were mentioned about the gaps in research studies that revolve around the amount of instruction given and precise descriptions of the intervention. In addition, another issue with the research has been specific details about personnel involved, time spent, facilities used, and finances needed. It is felt that many times this type of research is not completed because of the funds needed and the time involved in these types of studies. Past research has lacked controlled conditions, and in addition, the pre-service teachers are not followed into their first years of teaching to see how the interventions and instruction really impacts student outcomes.

After reviewing the NRP (2000) report, it is clear there needs to be conceptualizations of teacher education programs in the area of literacy, and that these need to combine actual research from a variety of views from leading researchers in the field.

After providing the terminology for successful literacy for all students and reviewing the studies completed by the NRP (2000), what must now be considered, as the NRP clearly states, is how to prepare teachers for the arduous task of teaching literacy. Looking at the work of leaders in this field, an excellent resource entitled *A Good Teacher in Every Classroom,* Darling-Hammond and Baratz-Snowden (2007) provides two models to allow us to envision first a framework for learning how to teach **(**Figure 8) and second, a model for preparing teachers for a changing world **(**Figure 3). This book, which is sponsored by the National Academy of Education and is written by two highly influential and well-known researchers, not only adds to the previous research, but also allows teachers to envision successful teaching and communities of learners by providing visual representations. In addition, it takes into account the changes in society that Myers (1996) has proven to be vital in terms of how literacy has changed throughout history.

In Figure 8, the authors encapsulate a framework for learning to teach (Learning Communities) that ties to what all the other studies imply. In order to establish a learning community, there must be knowledge and understanding of content, visions of good practice, instructional strategies, positive dispositions in terms of teaching and children, and practical resources for the classroom (Darling-Hammond & Baratz-Snowden, 2007).

In Figure 3, it is suggested in the first circle that pre-service teachers need to learn how students learn, develop, and acquire language. Circle two of the Venn diagram deals with Knowledge of Subject. This deals with not only knowing the subject matter, but how to organize curriculum based on the needs of each individual student. Finally, the third circle deals with Knowledge of Teaching. This relates to developing content-specific pedagogies, how to teach a classroom full of diverse learners, and methods to assess these learners and plan for instruction.

3 Knowledge of Teaching

Teaching Subject Matter

Teaching Diverse Learners

Assessment

Classroom Management

1

Knowledge of Learners
& their Development in
Social Contexts:
Learning

Human Development

Language

2

Knowledge of Subject
Matter & Curriculum
Goals: Educational
Goals & Purpose for
Skills,: Content Subject
Matter

Teaching as a Profession
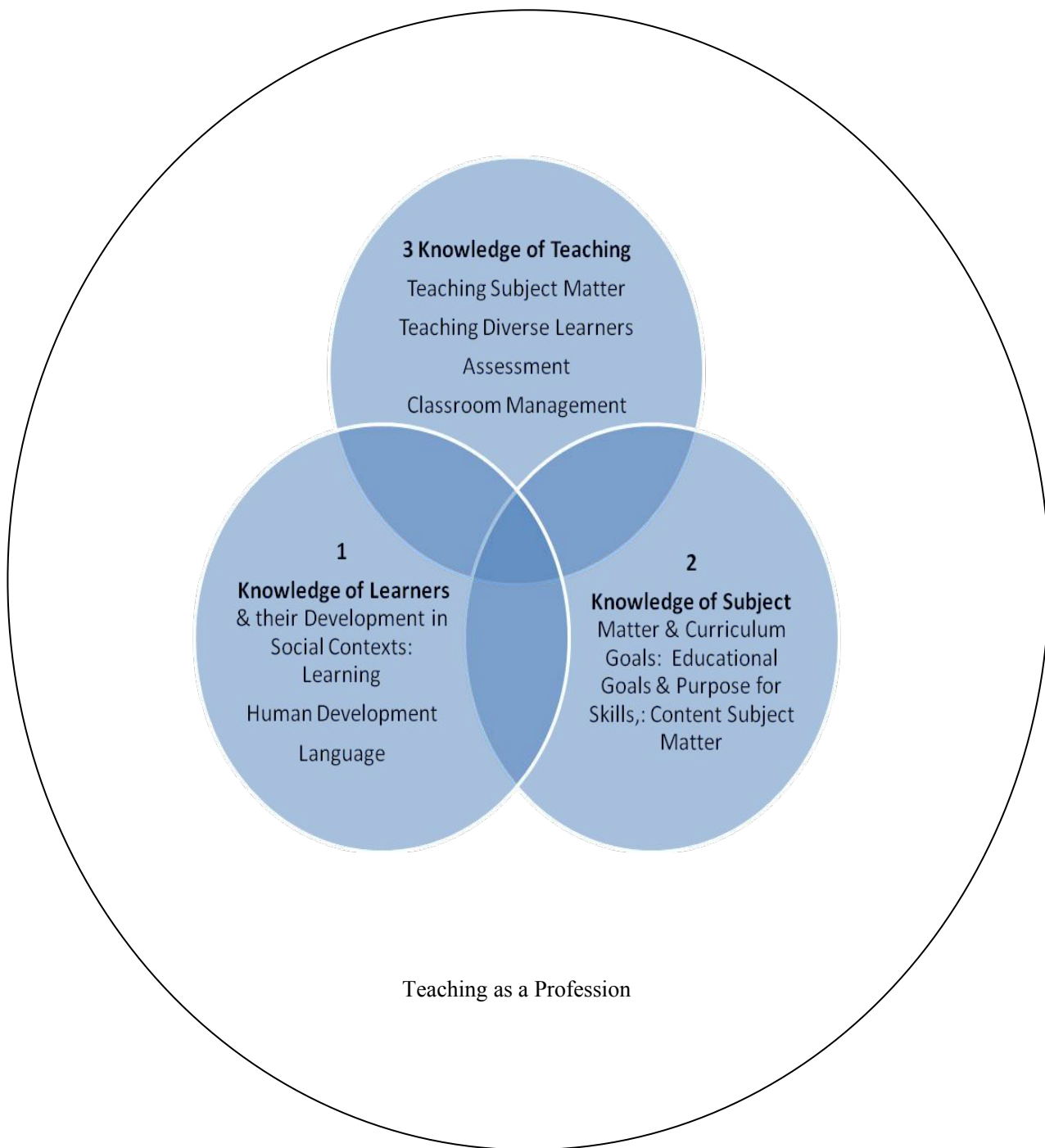
FIGURE 3. Preparing Teachers for a Changing World

History Speaks: Teacher Education Programs

Having these two models (Figures 2 and 3) now leads to considering how to successfully plan for an effective teacher education program that will incorporate the models and the agreed upon necessary literacy skills needed for students in today's society. In order to do this, taking a look at the past and what we have learned may assist in planning for the future. When contemplating our nation's path of literacy development, it has been a history rich in art in terms of oral speech and literature. Although these ideas that stem from earlier decades, as Myers (1996) has suggested, we still need to learn from our past and understand why we have so many different views and levels of literacy in our country today in order to effectively teach students.

As early as the 1900's, Haley, one of the founders of the American Federation of Teachers, firmly believed to let the educators, the ones who know the needs of the students, to pave the way in terms of instruction (as cited in Myers, 1996). In order to allow for this in teacher education programs, we need to make sure our pre-service teachers know the important research-based skills to teach the students and how to assess them and work with them individually using differentiated instruction. About that same time, Thorndike's (1904) ideas of readiness, repetition, and feedback to teachers were all novel ideas for an early time in history, but one that still serves teachers well even today.

Myers (1996) and Cazden (1995) claim in order to allow for preparing students in literacy. Examination of the realities of the workforce is needed as we teach students how to work with an events-based curriculum that allows for the readers, writers, and speakers to speak the "code." This will allow for collaborating with others, using tools of our time, having a set of cognitive skills that are needed in the workplace and in life, and giving all students the power to be successful. Myers (1996) cautions us about the diverse population, as many of the other researchers do, and that teachers need to remember students come with different home and community literacies, so this must be taken into consideration and nurtured, not ignored.

Cazden (1995) reminds us that explicit instruction is critical, but so is participation. Students need the scaffolding, which allows them to move to becoming independent readers, writers, and thinkers. And with today's political factors, as Blackmur noted as early as 1955, in order for Americans to be able to live in our changing democratic society that our founding fathers fought for, one must be able to infer, critique, interpret, and translate others' words (as cited in Myers, 1996). These ideas can't just be ideas for the students of our American schools, we have to start with the individuals who can ensure success for all students: the pre-service teachers.

In addition, over the past two decades there have been many reports on preparation of teachers in the area of literacy. Austin and Morrison's 1962 milestone study was the first of its kind, as it provided the first documentation of teacher preparation in reading offered in the U.S. The conclusion of this report was the vast need for change in teacher education programs in terms of methods, courses, and preparation. It was fifteen years later before this topic was addressed again in a follow-up entitled *The Torch Lighters Revisited* (1976). Although improvements in content had been made, specifically in the number of courses offered and the number of topics covered, as well as added field experience, the researchers still concluded lack of research in this area (as cited in Myers, 1996).

Current research has been limited, as there have been scarce reviews of literature on education of pre-service teachers in recent years completed by Anders, Hoffman, & Duffy (2000); Darling-Hammond, (1999); Hoffman & Pearson, (2000); National Reading Panel, (2000); Pearson, (2001); and Snow, Burns, & Griffin, (1998). Although these reviews were different in the way presented—the NRP (2000), Snow et al., (1998), and Anders et al., (2000) were quantitative studies.   The researchers all came to the same conclusion: there is a major lack of research in the area of teacher education.

When analyzing the reviews, Anders, Hoffman, and Duffy (2000) note that the most successful teacher preparation programs include characteristics of monitoring, coaching, supporting in the field, collaborating and discourse with professionals, and reflecting on practices. The Anders et al., (2000) study was grounded in social constructivist views of learning and instruction. This goal was accomplished by

supplying individual and collective perspectives that are sometimes missing in discussions of literacy teacher-research inquiries. Using qualitative content analysis methodologies, the results indicated that these educators learned about themselves as members of a system, learners, and change agents within education.

When reviewing the work of Darling-Hammond (1999, 2000, 2005), she addresses the concern regarding teachers who are completing teacher education courses and those who are enrolled in alternative programs. This, too, is an issue facing teachers of literacy. There are two views on the topic of reform of teacher education. When President Bush was elected in 1988, his proposal was to encourage alternative teacher certification programs. In addition, Newt Gingrich and Chester Finn and the Thomas B. Fordham Foundation pushed for removal of teacher education requirements to assist in luring bright college students into the profession of teaching (Darling-Hammond, 1999).

The other side of this issue argues there is a need for redesign in teacher education, and Darling- Hammond proposes it needs to start with strengthening knowledge base (both in theory and practice). This debate should be ended due to the vast amount of empirical research conducted. Fully prepared and certified teachers are more successful with students than teachers without this preparation (Ashton & Crocker, 1986; Evertson, Hawley & Zlotnik, 1985). In just one study alone, Gomez and Grobe (1990) researched the performance of teachers who were trained through alternate certification. It was found that their performance was much more varied than that of candidates who had completed traditional teacher education programs, being rated 2 to 16 times as "poor" on each teacher factor evaluated. In terms of student outcomes, there were significantly lower achievement gains in language arts and writing (Darling-Hammond, 2000).

What can be concluded from these studies is the idea that teacher education programs need to be in place for pre-service teachers, and they need to be redesigned in order to keep pace with a vastly changing world and foster positive student outcomes. The studies of Darling-Hammond (1999, 2000, 2005) offer two approaches as alternatives. First, she suggests a need for strengthening knowledge base and next adding more field experience to connect theory to practice.

Hoffman and Pearson (2000) evaluated and synthesized different models of reading teacher education in considering what has been in place in the past and how pre-service teachers' instruction needs to change. First discussed is what they coin a "service" model, which relates to the satisfaction of those who participate in teacher education programs. The U.S. National Center of Educational Statistics (1995) gave results on a survey of teacher satisfaction in terms of their preparation. In 1984, 46% of those claimed a very high level of satisfaction as compared to 58% in 1985. In terms of surveying teachers with less than five years of experience, 64% expressed a very high level of satisfaction. When surveying teachers regarding satisfaction of teacher preparation programs relating to students from diverse backgrounds, 81% gave a positive response. The findings reveal a positive mindset in regards to teacher preparation programs (Hoffman & Pearson, 2000).

When looking at a product perspective on teaching, Hoffman and Pearson (2000) researched data from teacher licensing, performance-based assessments, and teacher exams. The vast majority of these new teachers who participated in induction programs were given high ratings by principals on the qualities of new teachers (Hoffman, Edwards, O'Neal, Barnes, & Paulissen, 1985).

Adopting what Hoffman and Pearson (2000) calls a productivity perspective on teacher education preparation, it was found that that there is a relationship between monies allocated and test scores. In one study in particular (Greenwald, Hedges, & Lane, 1996), positive effects were found for levels of experience and teacher education, going so far as to say the greatest rewards occurred when financial resources were invested on teacher education. When considering the notion of replacing traditional education programs with alternate certification, Evertson, Hawley, and Zlotnik (1985) concluded that the traditional programs were most favorable in outcomes, although statistics were never presented.

The last model researched by the team of Hoffman and Pearson (2000) is one of experimental design, and the results are favorable in terms of traditional teacher education programs. Although there is no known "pure" experimental research completed where there is a control group not receiving traditional education, there have been a number of studies, such as one completed by Ashton and Crocker (1987) which

suggests that teaching satisfaction levels, and students' learning in the classroom are less favorable for non-traditional education students. The limitations to these findings are the fact that they do not key in on the qualities of effective teacher education programs or practices, but they do encourage educators of the positive impact of teacher education.

After considering the history and these models, an evaluation perspective on teaching preparation, Hoffman and Pearson examined data from various teacher education programs across the United States and used what the International Reading Association Commission on High-Quality Teacher Education (2003) identified as the 17 most essential components of professional development, which surfaced during the 1970's but has since been updated. These include understanding of the English language as a communication system, interactions with parents and the community, instructional planning, developing language fluency in early childhood, language development in social settings, teaching word attack skills, developing comprehension (including analysis of meaning, synthesis, generalization, and information acquisition), developing literacy appreciation, and initiating diagnostic evaluation of reading programs, school and classroom organization for diagnostic reading, adapting instruction to varied linguistic backgrounds, treatment of reading difficulties, and initiating improvements in school programs . A list of competencies was given for each of these areas, with a very precise teacher outcome to be obtained.

The limitation to this study is there is no published evaluation of these programs, and this movement, which was coined "Competency Based," vanished. The IRA has a current list of critical elements of teacher education programs for literacy that can be found in APPENDIX C. Along with this, other research reports by such agencies as the NCATE (NCATE), the Rand Study (2002), the meta-analysis of Sparks, Loucks, & Horsley (1990) in conjunction with Cruickshank and Metcalf (1990), and the renowned work on teacher education by Strickland, Snow, Griffin, & Burns (2002) have provided their ideas of critical elements. This side-by-side comparison in Table 2 allows for a visual inspection of elements that are similar and different.

Following the IRA's Evaluation Perspective came what Hoffman and Pearson called the Teaching Effectiveness Movement. This era was one that included stronger

theory as research within the process paradigm offered a curriculum for training that was more credible. The one obvious feature of this model is teaching practices are related to growth in student achievement. Good reading teaching practices were brought to the forefront (Brophy & Good, 1986; Dunkin and Biddle, 1974) and in reading (Duffy, 1981; Hoffman, 1986; Rupley, Wise & Logan, 1986). This was a new direction for teacher education (as cited in Hoffman & Pearson, 2000).

Finally, true correlational and experimental studies came into focus in the '80s. Rosenshine and Furst (1973) made a much-needed plea for a descriptive-correlational-feedback loop in teaching. What was felt was needed was taking teaching behaviors found through these correlational studies and then using experimental studies where causal relationships could then be discovered. This became the focus and ranged across content areas and teaching processes (Emmer, Evertson & Anderson, 1980) and the studies of different age levels (Stallings & Kaskowitz, 1974).

At this point in the history of teacher education preparation, such researchers as Griffin and Barnes (1986) and Anderson, Everett, and Brophy (1979) began to conduct innovative studies. These studies focused on actual experimental research where there was a control group of teachers who received training in what were at the time considered "good practices" such as reading recitation and turn-taking practices. Data collection dealt with direct observation of the teachers and analysis of logs and journals of the people leading the staff development (Griffin & Barnes, 1986).

The result of these types of studies led to teacher evaluations and standards in the mid- '80's. It was suddenly believed that waiting for full certification after the teachers completed an induction and evaluation process would allow for retention of the best teachers and release those who were seen as incompetent (Defino & Hoffman, 1984).

Also during this time, there was a turn toward focus of larger constructs that might be the basis for teacher training, such as the Direct Instruction Model. The Follow-Through Studies (Stallings &Kaskowitz, 1974), the Beginning Teacher's Evaluation Studies (1974), and the synthesis of Barak Rosenshine (Rosenshine, 1971; Rosenshine &Stevens, 1984) were all studies of this model. The results found that direct, explicit instruction was engaging to students and could be taught to teachers

under experimental conditions. Myers (1988) even measured growth on standardized test as an outcome of this model and found favorable results, but reported no effect sizes.

This idea of direct instruction has now led to "packaged" programs that are more content specific and are more organized than previous programs. The most notable are two called Reading Recovery (Clay, 1990) and Success for All (Slavin, 1998) which have both found favorable effects. The aforementioned program was reviewed by Shanahan and Barr (1995) and showed positive results that allowed for struggling students to be brought up to the level of average-achieving peers. Limitations of this program included the cost, exclusion of certain students, and professional developments. The training of this is long term and requires a lot of reflection while teachers still carry out their normal teaching schedule of duties. Gaffney and Anderson (1977) found that the type of reflection that showed up during Reading Recovery allowed for needed changes within the classroom settings. Hoffman and Pearson (2000) claim this is a training model because of the set of specific skills that are taught to the teachers or as an example of training set in the context of teaching. Reflecting on these types of programs allows for speculation of what we, as educators need to reflect on next in terms of teacher education.

Success for All (Slavin, et al.'s 1990) is a program that thrives on the idea that all students should be reading on grade level by the third grade. The reading period is focused around the CIRC model (Stevens, Madden, Slavin & Farnish, 1987) that is an acronym for Cooperative Integrated Reading and Composition. This program is characterized by grouping by abilities, small groups of individualized instruction, and a designated block of reading, with an option of an additional tutoring support session of 20 minutes a day. Like Reading Recovery, the teacher training is extensive and monitoring of student progress is critical to the success of the students. The results of this program have been found to be effective (Slavin, Madden, Karweit, Donlan, Wasik, 2000) but limitations have been mentioned as to the fidelity of the implementation of the program (Jones, Gottfredson & Gottfredson, 1997). Fully implemented programs are necessary for this success, which includes much staff development. Educators reviewed these two programs due to their high popularity and familiarity. With the

emphasis on learning and set procedures they bring to training, they allow consideration of what are the critical elements of teacher training, as were seen by Table 2. In addition, use of several of the most noted studies and organization's ideas of teacher education training were included.

Another initiative that came along during tenure of No Child Left Behind was the Reading First Program. The Florida Center for Reading Research (FCRR) issued a summary of what types of characteristics were being seen in these schools that were allowing for better than state averages in the 2005-2006 school year. What Crawford and Torgeson concluded was that seven common characteristics were seen: strong leadership; data utilization and analysis; effective scheduling; professional development in all areas of literacy; parent dedication; scientifically-based intervention programs; and positive beliefs and teacher dedication seen by educators (as cited in Moats, 2009).

Teacher Education Programs: Where Headed Next?

As Hoffman and Pearson (2000) find the critical elements of Sparks, & Loucks-Horsley (1990) to show promise of effective teaching, it is pointed out that in order to successfully navigate this "list" of elements, there must be "…a personal and professional commitment to lifelong learning acquired by those teachers who want to confront the complexities and contradictions of teaching (Hoffman & Pearson, 2000, p. 35). The mention of a balanced approach that is used suggests in order to conquer the complexities of reading and writing based on the idea that there are some aspects that should be trained, but others that just need to be implemented based on the individual students. This is mentioned based on the limitations of the aforementioned teacher training and student teaching programs. The previous programs were all abandoned because they left unanswered questions and a limited amount of knowledge.

Now is the time to begin considering where institutions need to go with educating the teachers of tomorrow. When taking into account Cowens (2003) highly comprehensive list, one such model that can be utilized is in the work of Gerald Duffy in *Explaining Reading.* Duffy's view of teacher education is the internalization of effective

skills and strategies and change to a more teacher-centered, deliberative mode. Teachers are in control of their own thinking and actions. He argued:

> "We must make a fundamental shift from faith in simple answers, from trying to find simple solutions, simple procedures, simple packages of materials teachers can be directed to follow. Instead we must take a more realistic view, one which Roehler (1990) calls "embracing the complexities" (Duffy, 1991, p. 15).

A few studies have emerged from this thought process on educating teachers, and one such study (Anders & Richardson, 1991, Placier & Hamilton, 1994) dealt with the relationship between teacher's beliefs and practice. Thirty-nine intermediate teachers were given readings and had discussions about improving reading comprehension. It was found that these teachers were approaching teaching from the knowledge of practice approach (Cochran-Smith & Lytle, in press) that allowed for confidence in decision making along with a responsibility to make changes in their classrooms and decisions for their students that were needed to ensure success.

This study can be partnered with that of the Metcalf Project (Tierney, Tucker, Gallagher Crismore & Pearson, 1988), which used the model of teacher as researcher. This involves taking charge of needed professional development and reflection.

Snow (1991) discusses teacher education programs and uses a similar term to knowledge base in discussing what future educators need to know. She cites a deep understanding of the nature of language (including the terms phonics, syntax, semantics, pragmatics, and rhetoric), as well as social diversity in these to keep pace with the changing world, which is an idea that echoes Myers (1996). Oral and written language need to work together to support each other, and citing a Vygotskian (1978) theory that learning occurs as students construct their own meaning, and this theory works no differently with student teachers.

Snow et al., (1998) synthesis of research related to literacy describes seven characteristics of exemplary teachers.
These individuals:

- Create a literate environment

- Provide explicit instruction in writing and reading

- Create multiple opportunities for reading practice and activities

- Select text-appropriate materials for students

- Adjust methods of teaching to meet the needs of all students

- Encourage self regulation

- Show strong managements of resources, behavior, and instruction

These go along with the work of Pressley (Pressley et al.'s, 1996) and are shown to help guide teacher education programs.

After reading and analyzing these six, there are several points they share in terms of beliefs in effective teacher education. First, all teachers must have a knowledge base that will allow for linking this newly acquired knowledge to instructional practice. These novice teachers must learn flexibility and adaptability in order to be responsive to all students (of which the population is becoming more diverse). There needs to be practicum experiences that provide for connection of this knowledge base, but also is one that possesses support, guidance, and feedback. Ongoing professional development is a must, and the pre-service teachers need to see the value and build a belief system such as the one compiled by Cowen (2003) that allows for them to become lifelong learners. Collaboration is important, as teachers talk about their practices and issues within their classrooms, and learning communities are organized based on need. This is in keeping that these types of efforts related to teacher learning (Pearson, Spalding, & Myers, 1998) as discussions of assessment tools almost always lead to discussion of teaching and curriculum. Teachers and pre-service teachers want to know what sorts of teaching leads to the desired outcomes and can be useful as a springboard for discussions of practice.

There have been a series of studies that have led to examining teaching, learning, and practice (Sarroub, Lycke, & Pearson, 1997; Sarroub, Pearson, Dykema, & Lloyd, 1997), which focused on portfolio building based on school-university collaboration and new state standards. This sparked an engaging way to allow students to reflect on growth as readers and writers. Of note is a study (McVee and Pearson, 1997) in which university individuals do research and school employees model shared

responsibility (Vygotskian terms as seen in the study of Gavelek & Raphael, 1996). The impact on student learning was seen in the increased amount of reflection by students in the progress of their own reading and writing.

Allington (2005) refers to the five areas of necessary instruction for reading that the NRP reports as well, but includes motivation, matching text to students properly, proper grouping of students, extended-time to read, informative assessments, and expert tutoring as needed to add to the "Fab Five" of phonemic awareness, phonics, vocabulary, fluency, and comprehension. Allington talks of "one size does not fit all" leaving the feeling that reading is more than just simply teaching teachers to compartmentalize the skills, but to think about the skills and the different types of learning, different types of learners, and different levels of support a teacher can give.

The Importance of Self-Efficacy and Motivation

The review of the literature on cognitive learning and what works in teaching has been explored, but the affective domains are just as important when it comes to literacy. With today's changing society, one that is filled with video games, I-phones, and high definition sound and visual, motivating students to read and write from the simple form of a book can be difficult. The affective domains of motivation and self-efficacy are closely tied together, and the Reflections Interactive Notebook is a tool that can instill the beliefs that students can be successful, as well as give them the desire needed to learn. These two domains are so closely tied together, that in this section of the literature review, they will be addressed simultaneously. In addition, all other aspects of the Reflections Interactive Notebook will circle back around to two important parts of teaching and learning: motivation and self-efficacy.

Part of Bandura's (1986) theory of self-efficacy states that efficacy may be most easily developed early in learning. This implies the student teaching experience and even the first years of teaching could be vital to the long-term maturation of teacher efficacy. Since Bandura's development of this learning theory, many have tried to define it in their own language. Walker (2003) states that "Self-efficacy refers to people's specific judgments and beliefs about their abilities like reading a book, writing a

poem, etc." (Walker, 2003, p.173). Some of the most powerful influences on the development of teacher efficacy come from the professors, students, and instructors that pre-service teachers come in contact with during their teacher education programs. Unfortunately, there are few studies that exist that follow efficacy in the early years of teaching.

Shell, Murphy, & Bruning (1989) did complete a self-efficacy study dealing with pre-service teachers and their outcome expectancy (self-efficacy) in reading and writing. Research based on prior studies by such people as McCarthy et al. (1985), it was found that self-efficacy beliefs are strong predictors for writing performance in college freshman. Shell, Murphy, & Bruning (1989) used self-efficacy instruments for reading and writing, which were based on the work of Bandura. The findings revealed that self-efficacy and outcome expectancy beliefs work together for significant variance in reading achievement, with self-efficacy being the stronger of the two predictors. Self-efficacy, not outcome expectancies, account for significance in their writing. Reading correlation was .90 (self-efficacy) and .45 (outcome expectancy). Writing was at a .68 correlation (self-efficacy) and .29 (outcome expectancy). What is interesting about this study is that how a person believes about the likely outcomes of successful behavior assume importance only after a person believes that the job can be done successfully.

A study by Hoy and Spero (2005) researched changes in teacher efficacy from the start of a teacher preparation program through the first year of teaching. This was a quantitative study that used Gibson and Dembo's Teacher Efficacy Scale, Bandura's assessment of Instructional Efficacy, and an instrument designed to reflect the specific context and goals of the preparation program studied. Results were reported as significant, but then during the first year of teaching, there was a decline. The researchers felt the changes in efficacy during the first year of teaching were related to the decreased level of support received.

As Gorrell and Capron (1990) believe, a teacher education preparation program that allows for the development of self-efficacy is crucial. "It is important to instill a sense of efficacy in those who are being prepared to ensure that they have the confidence to attempt to apply their knowledge when the appropriate time comes" (Gorrell and Capron, 1990, p. 15). Dembo and Gibson (1985) state the degree to which teachers

believe they can affect student learning may affect teachers' success in obtaining the desired student outcomes, as well as foster the much needed relations between students and teachers (Dembo and Gibson, 1985).

One mixed-measures study completed by Cannon & Scharmann (1996) that can be considered as relating to all teacher education programs was one completed in the area of science education. 120 elementary education majors in an elementary science methods course were part of the study. There were five sections of the course being offered, and two randomly selected sections were tested before and three other sections after the performance of a cooperative teaching field experience. The experiences focused on modeling of instruction. Subjects' responses were taken from the Science Teaching Efficacy Beliefs Inventory, which measures science teaching self-efficacy beliefs.

A random sample of personal interviews was also given by the researcher to a selected sample of study participants at the end of the semester. The significant ANOVA findings reported for the data collection subgroup (time of teaching) main effect (F = 8.63, p < 0.01), lack of significant correlations between the alternative predictor variables, and the scores provides evidence to support an inference that early cooperative field experience had a positive influence on the subjects' science teaching self-efficacy. It can also be inferred that the key to this is cooperative and explicit modeling, and this type of teacher education instruction would be beneficial in every area of teacher education.

Another study of note was the aforementioned study of Gorrell and Capron (2010) regarding pre-service teachers' students. The students used two phases of training to instruct a child to find the main idea in a paragraph. The first phase provided instruction in either a direct mode instruction or a cognitive modeling mode. The second phase gave a skill-demonstration video with either the demonstration or task-oriented commentary or self- efficacy commentary. Gorrell and Capron (1990) reported results using A 2 (low self-efficacy vs. moderate self-efficacy) x 2 (cognitive modeling vs. direct instruction) x 2 (self- efficacy vs. task-oriented commentary) MANOVA performed on written protocols revealed statistically significant main effects for cognitive modeling and self-efficacy groups in applying the strategies that were taught. Again, the theme of

cognitive modeling comes into play, but now what is revealed is the importance of teachers having high levels of self-efficacy in order to be master teachers.

Knowing the role of self-efficacy in literacy, both as students and as pre-service teachers, it is important to review literature about how to best instill this in our future educators. Schunk (2003) names positive verbal response as a powerful source for developing self-efficacy. Making comments that are specific to the task performed is vital, and mention of strategies the student used to be successful helps to build self-efficacy. Linnenbrink and Pintrich (2003) found that those students who had a well-developed sense of self were the ones who could ask themselves questions about the content and check for understanding.

Another important way to promote self-efficacy is through modeling of explicit instruction. Again, Schrunk (1987) suggests a way to instill this much-needed belief in self by suggesting the use of cognitive modeling, which involves very explicit explanations and demonstrations, verbalization of the teacher in performing the demonstration, and reasoning as to why the teacher is performing the actions. This is a way of teaching new skills and concepts that will eventually allow for a gradual release of responsibility (Palinscar & Brown, 1984; Pressley et al., 1994) in order for students to be independent readers and writers.

Pajares (2003), a leading researcher in the area of affective domains in education, notes that the interest in self-beliefs in school has led to a thorough analysis of the theories and principles in academic motivation. Graham and Weiner (1996) stated that the study of self-efficacy is "dominating the field of motivation" (as cited in Pajares, 2003, p, 140). Academic motivation is thought of by these researchers as the beliefs that students can "…create, develop, and hold to be true about themselves are vital forces in their success or failure in school" (Pajares, 2009, p. 140). Pajares's study (2003) looks at students feeling confident in the ability to master a skill or task (called mastery experience), vicarious experience, social persuasion, anxiety and stress, writing self-efficacy, writing competence and gender. Using elementary, middle, and high school students (N=1256), and a likert scale to assess, he found that the feeling that a student could master the skills (mastery experience) had an effect size of .49, which was the largest. In his discussion, he calls on schools to realize the importance

of helping students develop not only the skills needed, but also the confidence that will allow for motivation. He quotes Bandura (1986) by saying,

> "Educational practices should be gauged not only by the skills and knowledge they impart for present use but also by what they do to children's beliefs about their capabilities, which affects how they approach the future. Students who develop a strong sense of self-efficacy are well equipped to educate themselves when they have to rely on their own initiative" (p. 417).

This allows for use of educational practices that can create a strong sense of self-efficacy and motivate students to learn.

A study that related directly to teaching self-efficacy and the role of teacher competence and how they perceived themselves as writers was completed by Lavelle (2006). In the study of 64 graduate school teachers, an examination occurred of the correlation between writing quality and self-efficacy scores. Using a Spearman ranks correlation, Lavelle found that a negative relationship to writing performance (r=-.395, p<. 00), indicating that low self-efficacy as measured by a high scale score, was related to writing quality that was poor.

In addition, Lavelle found a significant effect for what she coins deep/surface writing. Using a t test, Lavelle found (t) =2.06, p<. 05, as deep writing was related to a high sense of self-efficacy. Deep writing was defined as reflective, focused, organized, engaging, audience driven, thesis-driven, revised, coherent, transforming (going beyond the assignment), autonomous, and feelings of connectedness.

Lavelle makes reference to Frank's (2003) study that explored engagement of teachers when they are able to write their own stories in their own way (their own cultural and personal stories), and Shell's study (1989) of the relationship found between pre-service teachers self-efficacy and achievement in both reading and writing. She notes that further research needs to be completed to address how teachers' beliefs about writing impact writing instruction in the classroom. She believes that writing is a tool of learning and evaluation, and additional research is needed in how to go about developing related instruction. She also makes the point that reading and writing completed by the teacher subsequently affects the reading and writing of the students. Pre-service teachers need to feel confident in their own literacy practices and share

these with their students in order to make a difference in literacy practices of their students.

The Importance of Reflection

What are the perceptions and beliefs of pre-service teachers when they enter a teacher education program? Do these views change over the course of their coursework and student teaching experiences? If we are to truly make changes to teacher education programs to keep pace with the changing society and the standards-based curriculum, it is vital to think of what is needed for these aspiring teachers, in addition to knowledge of content.

One of the leading researchers in the area of how people learn best is Donald Schőn (1983). A philosopher, Schőn was known for the idea of the importance of reflective practice in the process of learning. In his book entitled *The Reflective Practitioner: How Professionals Think in Action*, he states his studies are ''an analysis of the distinctive structure of reflection-in-action" (Schőn,1983: ix). He argued that it was 'susceptible to a kind of rigor that is both like and unlike the rigor of scholarly work and controlled experimentation" (Schőn, 1983: ix). Professional educators and other professional groups took quickly to his ideas of the importance of reflection, and shifts in thinking in terms of reflection in action (or reflecting while doing something) and reflection on action (after you have done it) are critical to be a successful teacher.

Because of the nature of teaching, reflection is something that must not ever end, as each year there is a different group of students, with different skills, different family situations, and different views about school. Also, with research in literacy changing at such a pace, it is important to keep up with current research, reflect on how this could impact teaching methods and student outcomes, and then reflect on how these methods work after they are implemented.

In a qualitative study by Wilson and Cameron (1996), 28 pre-service teachers in Australia were asked to keep a journal for these purposes. Although their journals were less structured (explicit literacy strategies were not kept in the notebooks), the study was lengthy (3 years). Wilson and Cameron (1996) reported that these students

developed a teaching philosophy over the course of the study that was not there at the beginning of the program. They reported such comments from pre-service teachers as teachers needing to possess a good sense of humor and respect differences in all students.

Another current case study by Byrd (2010), examined pre-service teachers wishing to become second language teachers. In reviewing the literature, he cites Griffin (1993) as defining reflection as "a conscious effort on the part of the individual to carefully consider the beliefs, theories, and personal experiences that affect his or her action" (as cited in Byrd, 2010). Byrd (2010) looked in depth at one pre-service teacher. At the time, this student was in her student teaching placement at a middle school. He had two research questions in mind when conducting this case study: (1) What are the student teacher's perceptions of teaching and writing in the classroom at the beginning of the placement; and (2) What are the changes between the first and final statements of the philosophy and beliefs of teaching? (Byrd, 2010, p.3).

The assignment was given to the pre-service teacher by Byrd (as her college professor) and her supervising teacher at the middle school. She was to write weekly in a reflective journal contemplating issues she felt were important in realizing her dream of becoming a successful classroom teacher. Byrd did provide the student with prompts to initiate reflection.

To analyze the data, Byrd read journal submissions five times, looking for themes in the student's reflections. Byrd found two themes in the writing of the pre-service teacher: authentic tasks and communicative tasks. She wrote about what she felt teaching literacy should be and how she would teach it in her own classroom. In addition, she also discussed her rationale for why should would teach a skill or lesson a certain way.

Using this data, Byrd was able to think about how this related to his initial research questions. Beliefs dealt with his first research question, and uses of writing and her reason for her methods of teaching aligned with his second research question.

His conclusion was as follows: "Student teachers do not arrive at their placement as a tabula rasa. They come with beliefs from a lifetime of past experiences. In order to establish a baseline of information, I felt it was important to look into these beliefs …"

(Byrd, 2010, p. 5). This is critical, because as Berliner (1987), states, if student teachers do not have solid instruction and a firm belief system in place, they revert back to the way they were taught. Literacy has changed even since the education of the students who are currently in the teacher education program (Myers, 1996). Literacy instruction from their youth is not sufficient for the 21st century.

A model for adult learning that includes reflection is based on the work of Kurt Lewin, but was constructed by Kolb (1984). As seen in Figure 4, there are four stages in adult learning: (1) concrete experience; (2) personal reflection on the experience; (3) attaching known theories to the reflection, as Kolb calls Abstract Conceptualization; (3) restructuring or modifying the next experience, as Kolb calls Active Experimentation.

CONCRETE EXPERIENCE

PERSONAL REFLECTIVE PRACTICE

ACTIVE EXPERIMENTA-TION

ABSTRACT CONCEPTUALIZA-TION
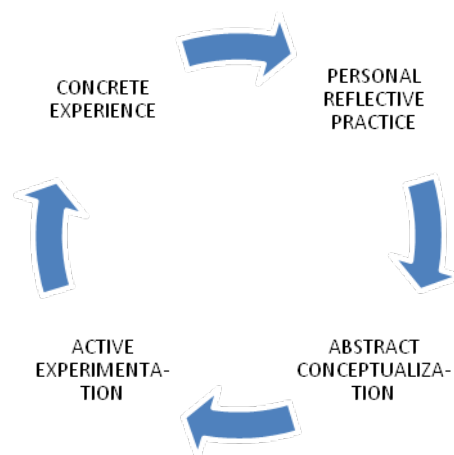
FIGURE 4. Kolb's Model of Adult Learning

The limitations of these new ideas in teaching reading have been the implementation in mostly in-service settings. There have been some instances on researchers trying to duplicate these ideas in undergraduate classrooms (Florio-Ruane, 1994).   Hoffman and Pearson speculate this could be because of the "knowledge for practice" position we take when educating our future teachers. This is an area of concern and in need of future research, along with how to implement a successful literacy program.   In addition, there is a scarcity of research that follows graduates of teacher education programs throughout their first years of teaching (or longer longitudinal studies), which echoes what was written in the NRP (2000) Report.

This literature review has allowed for evaluation and synthesis of the latest research in teacher education programs. This could provide guidance in the way institutions of higher education conceive of, develop, and implement student education courses and fieldwork for future literacy leaders based on the essential skills students need to be literate in our changing society.

First, when reviewing the NRP (2000), the implications for phonemic awareness reveal that pre-service teachers should recognize the importance of it, yet it is just a starting point in helping children to understand the use of the alphabetic principle in order to be successful readers and writers in the future. It is important that the alphabet is taught at this stage, and explicit instruction in small doses be provided (one or two skills of Phonemic Awareness at a time). As with all instruction, students will excel at their own rate, so offering differentiated instruction is important. Some students will already be reading in kindergarten, whereas others will be at the beginning stages of understanding phonemic awareness.

In addition, phonemic awareness is only part of the reading program. Although research has not been focused on this fact (NRP, 2000), instruction needs to be engaging and exciting. The length of instruction in these studies showed that the effect sizes were largest when training lasted less than 20 hours, but what teachers need to realize is that children develop at their own rate. It is important to pre-test students at the beginning of the year to determine what is known about phonemic awareness in order to plan for instruction.

As most of these studies find, there is a need for well thought-out policies that relate to accreditation of teacher education programs that are more performance-based in order to tie knowledge and skills to practice.   Also, a theme of "balance" seems to emanate. In classrooms of the most effective teachers, these researchers have spoken of not only teaching the five areas of reading, but also teaching the necessary skills that occur within the context of writing and reading (Pressley, et al.'s, 2001). Teacher educators need to be taught how to make decisions on their own and at any given moment, they must model instruction effectively, scaffold, and step in to help when needed, and reteach skills for individual students. Work like Duffy's (2003) that comes

on the heels of such researchers as Pressley (Pressley et al.'s, 2001) need to be incorporated into teacher training to help the future educators of our world.

Gerald Duffy in *Explaining Reading* even goes a step further by using the recent research to give teachers a guide in order to be able teach explicit reading instruction for struggling K–8 learners. Skills and strategies associated with vocabulary, comprehension, word recognition, and fluency are given, along with ways to actually explain and model each skill or strategy. In addition, Guffy provides teachers with instruction in using different levels of support (scaffolding) for different leveled students (differentiation of instruction).   Authentic text is used and the lessons are starting points for educators, especially novice teachers.

As seen throughout this research, literacy demands in our society today will be more challenging than ever. With the projections made by Hoffman and Pearson (2000) that cite a rapidly changing population, a high level of retiring teachers, an increase in poverty, and changes in literacies, preparing our teachers for tomorrow needs to begin with changing our teacher education programs today.

The overarching theme is that pre-service teachers come to their first jobs in education with very little other than the knowledge they possess from their own schooling. These individuals need to be taught at exemplary educational institutions with excellent teacher programs that focus on new content and methods, in addition to the ones already proven to work. They need to be given direct instruction on strategies and be able to use their strategies in their own reading and writing in order to teach effectively the children with which they work.

When teacher education programs allow students to commit to personalized teaching, reflect on what they are learning, assess their programs, and benefit from highly-effective professors who model the characteristics of master teachers, these pre-service teachers will be able to both gain the content knowledge (or knowledge base as Snow calls it), and become adept at making critical decisions. Tying this field knowledge with the content learned and being able to reflect on what they are learning, along with teacher educators who are willing to help pre-service teachers understand how they apply what they have learned and then practice it in the field, self-efficacy beliefs for these young educators will increase.

The lessons learned? Simple. First, there is critical knowledge these teachers need to acquire. Understanding of the basic terminology in literacy is a must. Additionally, they need to know how to individualize instruction for students and be able to work to match appropriate texts to students. Strategies need to be taught. Not just taught, but taught explicitly.

Also, these beginning educators need to see opportunities where application of knowledge can be linked to practical experience. Supervised field experiences need to include a legion of professors who all share a common goal and help to ensure the pre-service teachers observe examples of exemplary teaching.

Lastly, it is very important that pre-service teachers have a safe environment with teacher educators where they can reflect and process their thinking with others. Teacher educators can be mentors in helping them to solve problems within their field experiences, work with them to plan for individualized instruction, and really have them reflect on their teaching. As Allington says, "For too long, we have relied more on the assign-and-assess lessons and materials and provided too little useful strategy teaching and offered too few opportunities to engage in and develop literate talk. Changing in-school reading environments so that thoughtful literacy is fostered is one of the things that really matters…."(Allington, 2002).

This is true for students in K-12 schooling, and it is equally true for our teachers of tomorrow. It is time to change instruction to allow for knowledge of content, but also that will allow for use of strategies, create communities of learners, engage students in literacy, provide for the self efficacy that comes from being successful, and give time to reflect on practices to assess effectiveness.

The Current Study: Reflections Interactive Notebooks
and Reader's Response Journals
Introduction

It is clear that the number of experimental studies examining changes in teachers' knowledge and the relationship between student outcomes is limited. What are not clear are the specific recommendations about the nature of the knowledge needed for effective teaching of reading because of the limited amounts of studies. Louisa Moats (2009) has always been a leader in stating the obvious: teachers' knowledge about the written and phonological systems of English and other language structures is needed in teacher education. We know that teachers that use explicit instruction for teaching reading have stronger gains.

The Journal of Learning Disabilities (2009) recently had a special edition on what constitutes quality literacy instruction. As Reid Lyon, the former Chief of the Child Development and Behavior Branch at NICHS noted, there has been a lack of attention given to identifying specific causal links between teacher knowledge and reading achievement. He stated that studies need to go past that of word-level reading skills to examine relationships between teacher knowledge and comprehension, vocabulary, and writing (Joshi, et al., 2009).

This idea of experimental studies in literacy, along with how this affects pre-service teachers' beliefs about literacy, is much needed. Berliner (1987) states unless we give specific instruction to pre-service teachers in how to best teach literacy, these novice educators will fall back on the methods they know from when they were taught as children and young adults. Many times, literacy is taken as skills students already know coming into a program, and the focus is on the subjects that challenge students the most; literacy is the area that is taken for granted. It is important for students to have a belief system about literacy, feel confident in their teaching of this, and know the research-based practices that lead to positive student outcomes.

Theoretical Framework

The Reflections Notebooks and Reader's Response Journals are used to examine the relationship between teaching pre-service teachers and what effect this has on their beliefs as teachers of literacy, self-efficacy as readers and writers, self-efficacy as teachers of literacy, and knowledge of literacy content. The idea of the notebook was guided by the work of Vygotsky (1987) whose Social Constructivist Theory, helps to form several assumptions that enlighten the study of literacy.

Vygotsky explained that learning is a social phenomenon, which implies the community of the classroom plays a vital role in the success of all students. Student interactions with each other and the teacher, the practices of the teacher, and the manner in which the students are able to express themselves allow for better understanding of content and student outcomes that are positive. The classroom as a community influences how the students develop and how they will be able to demonstrate their knowledge of literacy.

Vygotsky (1987) reminds us that the student must be involved in the whole activity, and the teacher needs to provide for learning in a context that is meaningful. Vygotsky (1986) claims this community (he calls it social context) that is established allows for teachers to demonstrate their own cognitive processes (by means of explicit instruction) and also how he or she self-regulates, while sharing a love of literacy.

The first intervention, the Reader's Response Journals, are used to allow students a place to respond in writing to content read or studied. Thoughts, feelings, reactions, and questions about what has been read can be included in the journal. Discussion of the students' writings will take place, as well.

The Reflections Notebook differs in regards to what it provides for the pre-service teachers. It includes instruction that parallels what they will afford their future students in not just the five areas of reading, but in the skills necessary for the 21st century that were presented in the literature review. Pre-service teachers need to actually practice reading and writing strategies and reflect on how they will implement these strategies in

their own classrooms. The researcher will provide feedback to the student teachers, in turn modeling how to appropriately interact with each individual student to ensure success.   This could be easily compiled in an interactive notebook—an organized notebook that contains a vast amount of research-based strategies for literacy, along with practice and reflection completed by the pre-service teacher. In addition, the notebook will provide for differentiated and direct instruction that is so crucial to individuals learning to become adept at reading and writing in our "new society" that so many current researchers have referenced in the literature reviewed.

The themes throughout the current research support such a tool. No matter what area of literacy explored, the underlying themes are the same: explicit and direct instruction in a range of strategies, feedback from the teacher, discourse between students and teachers, and modeling and scaffolding of instruction. This tool for pre-service teachers allows them a "play book" of literacy strategies to tie to their practical field experiences, which are the two approaches that Darling Hammond talks about as crucial in order to connect theory to practice.   This will prepare them to become the literacy leaders of tomorrow. In addition, compared to packaged reading programs that cost thousands of dollars, the cost is approximately $12 to $15 per every 4 students, as only a notebook is needed (either spiral or folder-style) and materials such as tape and glue, and art supplies, if desired.

Organization of the Notebook

The notebook is organized with each mini-lesson on instruction using pages that are side by side (Figure 5). On the right side, the pre-service teachers will be given instruction in the form of explicit notes, samples included in Appendix D, which teaches the important skills and strategies that were found to be research-based best practices in the literature review.

The researcher will use authentic text to explicitly model the literacy strategies using picture and trade books. Different books will be used for the different levels (early elementary, elementary, and secondary). After modeling, the students will use choice books to practice the strategies.

The left hand side of the notebook is the Reflections' side. An example can be seen in Figure 6.   This side will allow for students to think about the purpose of the explicit instruction given (right side of notebook) and consider the purpose of the instruction, to write down procedures for the lessons, to practice the instruction using their own choice readings, and then to reflect on how it can be used in their own classrooms. Also, this will be tied to their CORE Teaching Reading (Honig, Diamond, & Gutlohn, 2000) textbook, which is a researched-based required book for the course that gives additional research studies and possible additional activities to add in each area of literacy.

When pre-service teachers enter the classroom, they have a tool they can use to engage their students by enthusiastically modeling the best practices and using current literature and the students' own choice readings to allow for practice of the strategies. Personal inquiry is used as the students are reading what they want to read and will allow them to foster ownership by responding in their own style. Collaborative learning and much discourse ensues, as students share their own readings and work together to solve problems, and the teacher is there to coach and provide support for the students, using the notebook as an assessment of the skills learned by each individual student. Parents can become involved as students can share what they are learning and demonstrate strategies to their parents.

The method of the Reflections Interactive Notebook is a tool that takes into account the aforementioned most comprehensive list for literacy instruction that was presented by Cowen (2003) in response to the greatest literacy researchers of the 21st century. In addition, it is in alignment with the critical elements of teacher training (Table 2), while allowing for pre-service teachers to build a learning community, a seen in the Framework for Learning to Teach (Figure 2) and the Preparing Teachers for a Changing World Model (Figure 3), which prepares pre-service teachers for a changing society.

LEFT SIDE OF NOTEBOOK	RIGHT SIDE OF NOTEBOOK
Practice on Own: • Making connections Making inferences • Summarizing readings • Visualizing different aspects of the texts (character, setting, etc.) • Exploring your opinions • Questioning • Making predictions Purpose of Activity • Research-based purpose Reflections of Pre-Service Teachers: • Other books that could be used • Other ways the activity would work • Other ideas that are generated while learning	Explicit Instruction (Research-Based) Notes on Reading Strategies Graphic Organizers Examples of Different Types of Writing

FIGURE 5. Layout of Reflections Interactive Notebook

ENTRY #6: TEXT GRAPHING NOTES FOR PRE-SERVICE TEACHERS

Purpose: Study of plot and/or 6 traits writing (Ideas).

Procedures: At the start of the notebook, the teacher will read a story to the students that will allow for students to think about their lives (suggested title is *That's Good! That's Bad!* (By Margery Cuyler). As the teacher models fluent reading and the use of reading strategies, the students chart the story line on the graph. "Good" or happy events will be given a score of +1 to +5. "Bad" or unhappy events will be given a score of -1 to -5. This gives the student a visual of understand how the story changes over time.

For middle or high school students, suggested title is *Oh, The Places You'll Go* by Dr. Seuss. This can facilitate the understanding that picture books can be used for older readers for enjoyment and for sparking writing ideas. This book is the number one book gift item for high school and college graduates.

Next, the student will use the graph to graph his or her own life. The pre-service teacher will be asked at a later date to select one point on the graph to write a short personal narrative about his or her life.

Knowledge: Reading and Writing Connection to *Six Traits of Writing* (Culham,) and Plot Line (Comprehension, 5 Areas of Reading).

Reflection: Instructor will allow for pre-service reflection (which can be written in the notebook) of other ideas (such as character development mapping) and other books that can be used for this strategy.

FIGURE 6. EXAMPLE REFLECTIVE RESPONSE PAGE OF REFLECTIONS NOTEBOOK

In addition this way of instructing will allow for pre-service teachers to be exposed to formal scientific research in their teacher education program, which is vital to developing a master teacher. As Myers (1996) pointed out, literacy has changed many times throughout the course of our nation's history, and it will continue to change. Pre-service teachers need to know the importance of not only the "art" of teaching, but also how to go about researching the "science," as well, as surely literacy will continue to be redefined. Training teachers to be "researchers" from the start of their careers will ensure current researched-based practices to be used.

The reflective part of the journal will allow for students to examine their own practice and think about how they will use these skills in their own classrooms to find out what best works for them and their students. There is a lot of literature in the field of literacy that states a particular method or program allows for the best educational outcomes. Pre-service teachers need to understand the only way to make a causal claim is through the logic of the experimental method.

When they take this practice back to the classroom, the students of these pre-service teachers will be able to have a safe place to record information about what they learn in class in an engaging way. The pre-service teachers will be taught to remember the literacy histories of those in their future classes (Myers, 1996). For their students, what the teacher will encourage is use of several types of writing and graphics to demonstrate their understanding of the strategies and skills taught. Whether it be a picture of what the student imagines while reading, a haiku poem that illustrates the student knows about the main character (line 1 of the poem), the conflict (line 2 of the poem), and the resolution (line 3 of the poem), a word web that shows a new word learned that day, or a Story Pyramid Summary which tells about the book or story just read, this tool will allow not only the pre-service teacher to think critically, but it also allows for individual creativity and use of what Myers (1996) calls different literacies of home and community for each individual child. In addition, it ties reading to writing, which is the one evidenced-based way of teaching these skills (Korat & Schiff, 2009).

As researchers Collins & Block (2008) state in *Comprehension Instruction: Researched-Based Practices*, researchers have come a long way in recognizing that there is a closer link between comprehension strategies, motivation, and metacognition.

For the longest time throughout the many different literacy periods (Myers, 1996), we believed that all methods would work for all children. In addition, with all the findings about our changing society and diverse population, these assumptions no longer hold true. It is a tool that helps to promote independent, life-long learners. Initially, the notebook is very explicit and guided, but this type of tool allows for flexibility in how students respond, and once taught, students begin the gradual release of instruction, which is the goal for every student.

The next section will provide specific research to support the use of the Reflections Interactive Notebook, which also coincides with Cowen's (2003) philosophical belief system created by from the top reading researchers.

Instruction: Explicit, Differentiated, and Scaffolded

Explicit Instruction. Researched-based explicit instruction in reading and writing is key to a successful literacy program. In addition, of note are the effects of explicit instruction in self-efficacy, which is just as important as the cognitive domains of literacy.

Cunningham and Allington (2003) state that we need to assess children in their abilities to summarize, identify main ideas, and interpret what is read. The gap between their research and the NRP (2000) is that Cunningham and Allington (2003) have found that it is important to assess this in their reading, writing, and discussions.

Early research on the effects of directly taught reading instruction began in the 1980's with such models by Raphael & Wonnacott (1985) called QAR (Question/Answer Response) and Ogle's (1986) model of K-W-L (what you already know, what you want to know, what you learn), which were found effective. But what was later revealed is that these types of models did not provide for explicit explanations about how a student can "think" their way through the text (Block & Duffy, 2008). There have since been several studies (Duffy et al., 1987; Pressley et al., 1992) that show growth both in metacognitive awareness while reading and in achievement levels of students (as cited in Block & Duffy, 2008). In addition, studies have determined that direct instruction is effective at various grade levels (Brown, Pressley, Van Meter & Shuder, 1996; Block, 1999; Collins, 1991; Anderson & Roit, 1993).

This leads to the conclusion that pre-service teachers of all grade levels need training in direct instruction of reading comprehension skills, yet as late as 1999, Block & Pressley (2007) found that many teachers reported they did not have the knowledge base to teach comprehension. From the same study, many teachers felt that students just learned comprehension through reading frequently.

Interestingly, before 2000, there were 45 explicit instruction reading strategies that were suggested and commonly used by teachers to practice with their students. Current research (NRP, 2000; Block &Pressley, 2007) has shown that 9 strategies have the scientific basis for being necessary for teaching to students.   These are as follows: prediction, monitoring reading, questioning, imagery, re-reads, inference, main ideas/summarization/draw conclusions, evaluate, and synthesize. The first five on the list are supported by the NRP (2000) findings, and the last four were proven after the report was issued (Block & Pressley, 2007).

Knowing what needs to be taught to students, this must be considered when thinking about training of pre-service teachers in literacy.   Many claim that core reading materials, such as basal readers, sufficiently teach these strategies. What research has found is as follows:

- Eighty percent of basal readers do not contain these nine strategies that are research-based. In addition, many of them do not provide valid teaching methodology or how to scaffold instruction for students. In addition, instead of teaching multiple strategies, as has been recently been found to be most successful. These programs only teach one at a time (Pearson & Gallagher, 1983).
- The "look" of these lessons in basal readers is the same throughout. There is no note of how a student might grow (and allow for gradual release of responsibility) or provide instruction for teachers on dealing with easy versus simple text (Block & Duffy, 2008).
- The lessons in basals and other core reading materials do not demonstrate how to move from explicit instruction to implicit instruction where the students demonstrate use of the skill (Duffy, 2003).

- These reading materials have limited guided practice and students have little opportunity to show they are independently using these comprehension strategies (Block & Duffy, 2008).

What does this mean for our teacher educators? Durkin's study (1979) revealed that asking questions continues to be the most common way that teachers work with students on comprehension. What is now needed is an improvement in the methods used to teach students ways of comprehending. An important point in developing pre-service teachers in the area of literacy is to develop deep thinkers and allow for them exposure to teaching these strategies. Like Myers reported (1996), many of us have been taught literacy in different ways. What we need to ensure is that these strategies become habits of mind (Costa, 2009) for first pre-service teachers, so they can ensure the same for their students.

Differentiation and Scaffolding of Instruction. Differentiation of instruction is a way of teaching that allows for teachers to present curriculum appropriate for all students by focusing on their individual needs. Teachers plan for instruction based on students' individual academic needs and levels and offer students choices in the way they demonstrate their learning (Tomlinson, 1999, 2003). This allows for students to work at their levels of readiness while also allowing them to use their learning styles and areas that interest them (Tomlinson, 2000, 2001 & 2003).   The concept of this method of teaching is based on empirical evidence dealing with the readiness of the learner, student interest, engagement, motivation, and academic growth within different schools (Tomlinson & Allan, 2000).

When comparing this to learning theory, Vygotsky's ideas that students learn in a zone of proximal development, or a point in learning where the child needs support (scaffolding of instruction) in order to master skills or tasks (Vygotsky, 1978). The idea is with modeling and assistance, a student will eventually be able to perform independently.

Although this type of instruction became increasing popular with the Education for all Handicapped Act, Public Law 94-142, it has become more so since the No Child Left Behind Act of 2001 (NCLB), as all students are expected to read at the proficient level for reading and math.   Special education students (defined as those students ranging

from gifted students to those with learning and physical disabilities) have been given access to a regular education. There has been an increase in the amount of time these students spend in a general classroom. Between 1994-1995 and 2004-2005, the percentage of special education students with disabilities spending 80% or more of the day in the regular classroom increased from 45% to 52% (National Center for Educational Statistics, 2008).

Due to the now increasing levels of ability in the classroom based on the high numbers of students in special education, and the aforementioned changing population (Hoffman & Pearson, 2000), teaching has become increasing more difficult.   Tomlinson (1999), states that teachers can best teach to all students by differentiating instruction in three ways: content (what is required to learn), process (how the students learn the content), and product (the students' demonstration of what he or she has learned).

Unfortunately, there have been few empirical studies related to differentiation as a method of improving student outcomes. Most of the studies deal with differentiation and student motivation, perspectives of differentiation, and the challenges of implementation. There is obvious need for experimental studies in this area.

When addressing explicit and differentiated instruction, The Reflections Notebook allows for this first by addressing the deficits in basal and other materials in schools. It teaches all of the strategies, but focuses on teaching use of multiple strategies while reading (NRP, 2000; Block & Parris, 2008). After the teacher provides explicit instruction and modeling, students can use writing and discussion to demonstrate their knowledge. Each lesson uses engaging text that is on an easy level to allow for students to fully grasp the strategy.

First, the teacher will use picture books and/or trade books to explicitly teach the strategies. Beck and McKeown (2001, 2007) note that this idea of incorporating read–alouds is found to "nature language and literacy practice required for a special schooling experience" (as cited in Boyd & Devennie, 2009). These books can easily be tied to the 6 traits of writing (Table 3): Ideas, Conventions, Organization, Voice, Sentence Fluency, and Fluency, and additionally are tied to the Five Areas of Reading (NRP, 2000).

Danielson (1992) and Weber (1989) document the use of picture books with older students, as they serve as motivators and "present human experiences in microcosm" (Danielson, 1992, p. 652). They enhance visual literacy and give opportunities to combine reading and writing that allows opportunities for students to use authentic writing as samples. Weber (1989) reminds us that discussion of these books allows for critical thinking skills, as the adult writers often have deeper meaning that older students can determine.

Next, students will use their own choice books to practice the strategy on the left side of their notebook, allowing for differentiation based on the student's level of reading (content) and the output of the notebook. As stated, students will be taught the strategies and various writing skills, and will have a choice in how they respond.

In addition, after the nine strategies are taught, students will either continue to be provided support by the teacher (scaffolding of instruction), or will move on and work independently, using the Reflections Notebook daily for response to readings.   A major asset of this type of notebook is it serves as an assessment tool for teachers to know what support each individual student needs, and with such varied levels of learners in the classrooms, it allows for differentiation of instruction. Myers (1996) reminds us that students come to us with different histories of literacy. This is shaped by a student's culture and gender, as well as family background and ability levels. This notebook allows for students to respond in different ways, allowing for student use of learning styles. An additional strength is it allows for parents to become familiar with best practices in reading and writing, as the notebook contains explicit instructions on strategies.

Books and Time

Use of trade books produced significantly higher scores than any type of workbook or basal text (Block et al, in press). This is true for students regardless of reading ability, language spoken at home, ethnicity, or grade-level placement.

Block & Parris (2008) make note of the concern over literacy skills, especially reading strategies, being taught in isolation "more for strategies sake" than the sake

of actually comprehending text for larger purposes" (Block & Parris, p. 247). There have been many studies about teaching skills using authentic text and books of choice. The one most aligned with the idea of using the Reflections Notebook is simulation of a real-life book club, yet students have a choice of books to read and discuss their books based on "themes" and essential questions (APPENDIX E). The teacher can select the themes, but examples of these are Personal Struggles, Relationships, and Heroes. Guthrie, Wigfield, Barbosa, et al., (2004) found that the approach of using authentic texts yielded better results than teaching strategies outside that context (as cited in Block & Parris, 2008), and the choice of books paired with essential questions allows students exposure to many different books that classmates are reading.

In addition, Turner (1995) claims that choice is one of the most essential elements of motivation. This allows for teachers to help students match text with individual students in order to allow for reading at a level that is not frustration (too difficult) or independent (too easy), but on a level that students can receive actual instruction.

In a phenomenological study, Flowerday, Shraw, and Stevens (2000) examined the effects of choice on reading engagement, attitude, and actual learning. What they found was teachers who allow for choice in the classroom believe it increases not only the effort of the students, but their motivation and positive student outcomes. In addition, Turner (1995) and Sweet, Guthrie, & Ng (1998) found that teachers who are successful at motivating students often provide choice (as cited in Guthrie, 2000). As stated earlier, the students are replacing reading with activities of media, so it is more important than ever to allow for easy access to interesting print materials of all types in order to appeal to all students (McQuillan & Au, 2001).

TABLE 2. Connecting Reading and Writing

What is the connection between the six traits and reading?

(List created by participants of the Technology and Integration Workshop, October 10, 2007, Fairfax County, Virginia)

6 Trait	Reading
Ideas	Main Idea and Supporting Details
Organization	Text Structure (description, sequence, cause/effect, compare/contrast, and problem/solution)
Voice	Text types, persuasive reading, character development in narrative text
Word Choice	Figurative language, utilizing resources, visualization, and context clues
Sentence Fluency	Fluency, grammar
Conventions	Phonics, structural analysis, grammar

Allington (2002) reminds teachers that instruction must not be scripted, but must be a minute-to-minute decision making for the teacher based on the needs of the students. The use of picture books to teach the skills, and the discussions that ensue, are all not scripted. Scripted programs have shown negative results beyond grade one (Reading First Initiative, Subgroups, phonics, Appendix G, pp. 2-168).

The NRP did find positive results for seven comprehension strategies (see comprehension section) when taught, but mentioned that multiple strategy usage in a natural setting to be the most promising. This includes discussing what is read and allowing for reading time.

In terms of opportunities for reading, although the NRP and other researchers have noted that silent, independent reading shows no positive effects and that no experimental research has been conducted, there have been nearly hundreds of correlational studies showing connections between reading ability and opportunity to read independently (Reading First, Summary Booklet, p. 12). This has been documented by not only reading researchers interested in this area of reading, but by government–funded studies including Newman, 2001; Snow, Burns, & Griffin, 1998; NAEP Reading Report Card, and others.

The NRP (2000) noted that motivation can occur due to increased reading and is an important factor in the success of multiple strategy instruction. As Stanovich has asserted, "Out of school reading experiences were the cause of certain rich get richer effects in a variety of cognitive skills (Stanovich, 2000, p. 245). In Table 3, Anderson, Wilson, and Fielding, 1988) demonstrate this by their research on the variation in amount of independent reading and percentile rankings of students. This study that has been quoted as the most reliable and valid study that proves reading books is the best predictor of reading achievement (as cited in Routman, 2000).

TABLE 3. Variations in Amount of Independent Reading

Percentile Rank	Minutes of Reading Per Day Books		Words Read Per Year	
	Books	Texts	Books	Text
98	65.0	67.3	4,358,000	4,733,000
90	21.2	33.4	1,823,000	2,357,000
80	14.2	24.6	1,146,000	1,697,000
70	9.6	16.9	622,000	1,168,000
60	6.5	13.1	432,000	722,000
50	4.6	9.2	282,000	601,000
40	3.2	6.2	200,000	421,000
30	1.8	4.3	106,000	251,000
20	.7	2.4	21,000	134,000

10	.1	1.0	8,000	51,000
2	0	0	0	8,000

TABLE 3. (Continued) Variations in Amount of Independent Reading

Many schools are using programs such as DEAR (Drop Everything And Read) in order to keep up with current standards-based reform. However, research is still needed (Block, 2006; Wade, 2004) in order to determine the gains from such a program. The National Center for Education Statistic (1999) did reveal that students in grades 4, 8, and 12 who were reported doing more reading at school and home had higher average score. Research by Worthy & McKool (1996) indicated the reluctant readers would read more if given the opportunity. Ivey (1999) revealed through her interviews with students that middle school kids were not satisfied with the assigned reading and writing because it does not match their interests (as cited in Ivey & Broaddus, 2001). When Ivey and Broaddus (2001) conducted research with 1,765 sixth grade students in 23 schools and surveyed to find which reading activities students enjoy the most in class, Free Reading Time obtained 63% on the survey, and Teaching Reading Aloud 62%. The next activity had only 36%, which was the students' response of Reading Plays and Poetry Out Loud (Ivey & Broaddus, 2001).

Turner (1995) researched in two school districts in Michigan to find if a basal reading program or whole language/constructivist approach was hypothesized to be more motivational in learning. 84 first grade children were the participants in 12 classes: 6, which were primarily basal programs and 6 which were whole language. What the researcher was trying to ascertain is the use of what she referred to as literacy tasks which were open (child-specific, higher order thinking and discussion) or closed (memory/recognition skills). The skills were then coded, and what was found was that during open tasks, children used more reading strategies, stayed on-task longer, and showed more signs of motivation. These types of activities included opportunities for students to collaborate and discuss, while at the same time satisfied their interests due to choice.

The Reflections Interactive Notebook allows for this type of comprehensive program. Not only are students being given explicit literacy instruction, they are using authentic text as good examples of writing, the teacher is modeling explicit instruction, students are practicing the skills, and they have opportunities to share and discuss. Not only are the students reaping the benefits of the explicit instruction, but also the motivation of practicing the strategies using choice books is a highly motivating factor, and a "selling point" to peers in the class. This allows for the teacher to create a true community of readers and writers.

Literacy Connections

For many years, researchers have stressed the importance of the reading and writing connection, yet there has been much dispute around this concept. As noted, the NRP (2000) had gaps in their research on this topic, along with oral and listening skills. From the studies of such aforementioned researchers as Cowen (2003) and Snow, Griffin & Burns (1998), we know it is important to develop literacy programs that are comprehensive and include more than just the five areas of reading. In the Reading First Initiative, it states "Writing enhances reading, reading enhances writing, and listening and discussion enhance both" (Reading Initiative, Section Five).

Much research has been conducted on children's reading experiences and their reading and writing achievement (Nelson & Calfee, 1998; Reutter, 1993; Shanahan & Tierney, 1990). The synthesis of this research reveals that reading and writing tend to develop at the same time rather than separately. As Table 3 represented, (Culham, 2000) the six traits of writing can easily be paired with the five areas of reading that were identified by the NRP (2000). And this can be used to allow students to make their own connections about reading and writing, and use models of text to assist in writing. Fitzgerald and Shanahan (2000) remind us that this connection is obvious because both skills depend on "knowledge representations, cognitive processes, and contextual restraints" (as cited in Korat & Shiff, 2009, p. 292).

Korat and Shiff (2009) have taken the work of their predecessors and first synthesized the three models for reading and writing. First, there is a reading to writing

model, which is based on empirical research and unequivocally shows that reading promotes writing (Bereiter & Scardamelia, 1984; Eckoff, 1983; Smith, 1982). The second model is writing to reading, but shows no transfer from the knowledge of skill to the other. This is based on theories by such researchers as Graves (1978). The final model is interactive, with knowledge coming from either reading or writing, and then being generalized to the other process.

Shanahan (1984) evaluated these three models using not only an extensive database, but also reading and writing samples of over 500 students in the second and fifth grades. This study investigated the strength of the correlation of the reading-writing relationship. He used four reading measures of phonics, vocabulary, cloze reading, and comprehension, and eight writing measures that included spelling, vocabulary, story grammar, and syntax.

The data was entered into 24 separate backward stepwise regressions. Each of the measures acted as a dependent variable. This allowed Shanahan to test its relationship with all of the cross-set measures. The mean variance explained was .31, and the median variance explained was .40 for the 24 analyses.

When reviewing the data, what was found is the reading and writing model was the strongest model in terms of children's literacy development. Findings showed that more knowledge is transferred from reading to writing than vice versa. It was the only one of the three with empirical evidence supporting the outcome, as seen by such aforementioned studies as the one by Shanahan (1984) and Bereiter & Scardamelia (1984). In the study by Bereiter and Scardamelia (1984), the knowledge gained by students from exposure to examples of literary types was researched. Students demonstrated evidence of some obtainment of literacy knowledge and the transfer from the reading to writing model was considered conclusive (as cited by Korat & Schiff).

Although the Bereiter & Scardamelia (1984) study was from grade three through graduate level, a limitation mentioned by Korat and Shiff (2009) is that this needs to be studied at different levels of schooling. The Reflections Notebook is based on this Reading to Writing Method (Korat & Shiff, 2009) and will first be employed with pre-service teachers at all levels (early education, elementary education, and secondary

education) to find the effects of this as it pertains to the readings and writings of these future teachers.

Literate Talk: Teachers and Students

The environmentalist and writer, Rachel Carson, once said, "If a child is to keep alive his inborn sense of wonder without any such gift from the fairies, he needs the companionship of at least one adult who can share it, rediscovering with him the joy, excitement and mystery of the world we live in." With the changes in society that Myers (1996) revealed, it is more important than ever for teachers to strive to develop a life-long love of literacy and learning in every student. One of the best ways to do this is through the use of both written feedback and oral discourse.

First, as stated by Myers (1996) the structure of the family has slowly disintegrated, giving more responsibility to teachers as role models and part-time parents. It seems in order for students of today to respond, there must be a connection made with the teacher that will provide for the community of learners that is necessary for the success of each classroom.

Snow, Porche, Tabors, & Harris (2007) found the same results, as in the longitudinal study that followed 40 students from pre-school to high school and found that the "protective factors," as defined by academic and emotional support and connection with at least one teacher was one of the strongest indicators of student success (Snow, Porche, Tabors, & Harris, 2007, p. 136).
Routman (2000) states,

> "One of my worries continues to be that there are too few conversations in too few places—no active listening or compromising, no exchanges, no discussion about curriculum, no taking seriously the feedback from teachers. Yet, the connections, interactions, reflections, and new thinking that evolve from rich conversations are the means for defining what we know. I trust, as I believe we all must, that dialogue and debate, accompanied by flexibility and openness, will lead to new

insights and substantive learning, not just for our students but for us teachers, too. (xxxvii).

First, when talking about text talk, or activities that are based around discussion, researchers have found that problem-solving, comprehension, and learning indeed occur more readily (Anderson, et al., 1998, Nystrand, 1997).

Nystrand later worked with Applebee, Langer, and Gamoran (2003) on a study that examined the relationship between discussion-based approaches used to help understanding and students' literacy performance. This study was on a larger scale as the previous one, as 64 middle and high school English classes were utilized. Relying on the work of their predecessors, these researchers used case study methodology and descriptive analysis to examine this relationship and to see if previous work held true: those classes with discussion- based approaches were more successful.

What was found by Nystrand, Applebee, Langer, and Gamoran (2003) is that the work of Langer (1995) identified classroom practices that were most successful in terms of helping students to make meaning:

- Teachers treat all students as capable "envisionist builders" who have important potential contributions for the class
- Teachers use discussion to develop understanding versus testing what the students already know
- Teachers work under the assumption that questions are a part of the process of comprehending new information, rather than as the students' failure to learn
- Teachers use questions as starting points for discussions
- Teachers are facilitators who guide students to look at the world around them (text, students, etc.) with multiple perspectives, allowing them to become critical thinkers and learn from others, versus forming a consensus.

Langer (1995) worked with more than 50 teachers in this study and found that teachers developed a wide-range of discussion-based strategies to allow for the needs of their students. One limitation was that some teachers felt more comfortable working with smaller groups, but Langer felt this was a productive start for working with teachers.

As Nystrand, Applebee, Langer, and Gamoran (2003) analyzed data, they found that students in classrooms with more emphasis on discussion-based approaches yielded higher year-end literary performance across all levels. The one model that included discussion-based approaches paired with high academic demands had an effect size of .53. They found this approach was effective across a range of high achieving to low achieving students. They did state a limitation of their study was that because they worked in 5 different states (1 middle school and high school were selected from a district that had both a city and suburban school) the states had different ways of "tracking" students. They felt that because of this, instruction was not equal across the tracks. Although they see this as a limitation, this is the reality of the inequality of education that Myers (1996) refers to in his book.

In addition to considering discussion, teacher feedback plays an essential role in learning. In a study by Tunstall and Gipps (1996), the researchers quote their predecessor, Sadler (1989) who states that feedback is a crucial role in learning. Tunstall and Gipps (1996) completed a study in six schools in five districts in London, which provided for a range of different types of schools.

Eight teachers of first and second grade students participated in the research, and their major aim was to observe over the course of a school year where they were able to create a typology by coding taped sessions. They found the types of feedback to be as follows: (1) either verbal or non-verbal; (2) either positive or negative; (3) either process or product related, (4) feedback that was based on using or not using explicit criteria; (4) feedback to individual students; (5) feedback as part of classroom management.

They organized the feedback into the following types, each having a pair of opposite types of feedback: Type A (rewarding and punishment) and Type B (approving and disapproving); Type C (specifying attainment or specifying improvement); and Type D (constructing achievement or constructing the way forward).

The researchers found this study allowed for giving a framework for teachers to reflect on the type of feedback given. Types A-C all revealed obvious results, as if the positive feedback of "rewarding", "approving" and "specifying attainment" allowed for

positive results from students. The antithesis of each of these types did not provide positive results.

Type D, which they define as Constructing Achievement, gives the language to children to areas of what is being studied, and allows for students to feel as if their work is progressing. It also provides for reflection and direction for students. The other side of Type D deals with helping students to construct their own ideas of what could be done to improve their work. This gives students more space for choice. Instead of using the word "correction," this type of feedback focuses on the way to move forward in their work.

 Both sides of Type D feedback brought importance to the students' work and allowed for students to take more ownership in their work. This allows for teacher as facilitator, and a mutual evaluation by teacher and student of the work and development of the student with an eventual gradual release of responsibility.

When thinking about the changing population (Myers, 1996) teachers must consider "the literacy conventions of their neighborhoods and families and for helping others and themselves to develop translations to textbook English. Understanding a student's awareness of his or her own literary structures is the first step toward helping students to translate the structures to print-based school texts" (Myers, 1996, p. 27). This is especially true when trying to communicate with all students from a quite diverse population. Written and oral feedback from the teacher allows this understanding to occur.

Another study by Hyland (1998) used a case study approach (observation, interview transcripts, and written texts) to look at a small group of ESL students in regards to teacher feedback. The suggestion was there needs to be more open teacher and student discourse in order to allow for complete understanding. Hyland found with two of the students, even though they were given positive written feedback, the students did not feel positive about the assistance given by the teacher. Upon further discussion with the students, it was found that they did not feel the teacher was focusing on the area of reading and writing they felt most insecure about during class. Although it is difficult to ascertain what is going to work with different students, what these two studies show is that feedback needs to be written or said in a positive way and is effective in

either stating what the student has mastered, or leads them in a direction to construct their own understanding of what can be improved.

Using the Reflections Interactive Notebook allows for these two types of communication, discourse and feedback, to be used. Since each student has a notebook and has practiced using strategies in his or her own personal style, the suggestion by the researcher is to have conversations with students about their work and what they are reading, as well as look at the notebooks as a form of assessing what the student knows. The utilization of Post-It notes to specifically "talk" about what the student has completed, the strategies the students used. The researcher/teacher will even pose questions that will lead the student to cognitively be aware of what strategies were used and why they were used, which is in line with what research says works. If there are gaps in understanding, the teacher will know immediately and will be able to scaffold instruction by providing that student or students with additional assistance. The use of Post-Its allows for teachers not to "write on" the work of the student, and the use of Type D feedback (Tunstall & Gipps, 1996) will help the students understand, using literacy language, what is being done well or will facilitate in moving the student in the right direction.

Self-Efficacy and Reflection

When considering the use of the treatment of the Reflections Interactive Notebook with pre-service teachers, the notebook allows for motivation, modeling skills, feedback, and increased self-efficacy not only in their own writing, but also in their belief that they can be literacy leaders. Not only does it provide explicit instruction for the pre-service teachers, it gives feedback from the researcher in terms of the skills used by the future educators. The hypothesis is that there will be a correlation between the Reflections Notebook treatment and an increase in the self-efficacy of the pre-service teachers. Not only will they feel more confident about their own reading and writing, but they will also feel prepared to teach their future students using the researched-based practices.

The Reflections Interactive Notebook follows the ideas of both Schően and Kolb as they will not only provide the pre-service teachers with the opportunity to be given

research-based instruction, but will allow for them to examine and reflect on how the instruction will impact their classrooms, give them room to reflect on other possible teaching methods for particular literacy skills, and also reflect on their own readings and writings using the explicit instruction that is provided by the researcher. Upon entering their student teaching experience, students will have this notebook that can continually be used for adding new lesson ideas, concerns they might have to share with their professors, and even start a collection of book titles they see their supervising teacher use that work well to motivate the children of the 21st century.

CHAPTER 3

METHODOLOGY

Introduction

The purpose of this experimental study was to explore the effects of the use of two interventions (the Reflections Interactive Notebook and Reader's Response Journals) on pre-service teachers' beliefs, self-efficacy, and knowledge of their own literacy skills and their abilities to teach these skills to their future students. The following three research questions were addressed:

Research Question 1: What is the self-efficacy level of pre-service teachers regarding their own reading and writing processes?

Research Question 2: What is the self-efficacy level of pre-service teachers regarding their abilities to be effective literacy leaders?

Research Question 3: Do the explicit instruction techniques of Interactive Notebooks and Reader's Response Journals impact pre-service teachers differently in the areas of:

- ✓ Belief System
- ✓ Self-Efficacy
- ✓ Knowledge of Content

This chapter describes the participants, setting, and sample selection methods, instruments used, experimental procedures, instructional conditions, and the procedures followed to gather and analyze results.

Methods: Participants, Setting, and Sample Selection

Using GPower to determine sample size for MANOVA, a sufficient study requires 23 participants. With an effect size set at .80, and the significance level at .05, the power given is .95.   A larger population of 65 participants in the teacher education program at Florida State University was used. This sample represented the target population-- pre-service teacher educators across the nation. In order to obtain a

sample that is representative of the teacher education preparation population, three sections of reading (RED 4310: Early Literacy Learning, RED 4510: Teaching Reading in the Elementary School, and RED 4335 Content Reading for Secondary Teachers) were used. These sections of reading instruction did not differ significantly in terms of demographic variables, and they represent the students in the Teacher Education program (Table 4). The rationale for using all levels of education majors is to determine the strength of two independent variables (Reflections Interactive Notebook and Reader's Response Journals) using a large enough sample size.

Table 4. Demographics of Participants

Level	Gender		Intervention	n=		Major
	M	F	*RIN *RRL			
Early Education	0	15	RIN	15 total		Early Education
	0	13	RRL	13 total		
Elementary Education	0	16	RIN	16 total		Elementary Education
	1	9	RRL	10 total		
					Specialization	
Secondary Education	3	5	RIN	3	Communications Disorder	Secondary Education
	0	3	RRL			
				3	Math	
				1	Science	
				1	Social Science	
				3	Other	

*RIN= Reflections Interactive Notebook, RRL= Reader's Response Journals

Pre-service teachers who chose to participate in the study were randomly assigned to one of two intervention groups: (1) an intervention group that received

instruction on how to use the Reflections Interactive Notebooks (RIN) or (2) an intervention group that received instruction in Reader's Response Journaling.

Instruments

A survey of Pre-Service Teachers' Knowledge, Beliefs, and Self-Efficacy was administered pre- and post- treatment via computer to the two intervention groups. Teacher candidates were assured their results would not be given to their course instructors during the current semester, and the instructors were unaware of the identities of individuals in the Reader's Response journaling intervention group who did not wish to not participate.

This survey (APPENDIX D) is a compilation of previously piloted surveys: (1) The Literacy Arts Activity Grid (Cunningham, Zibulsky, Stanovich and Stanovich, 2009); (2) The Survey of Pre-service Teachers' Knowledge of Teaching and Technology (Koehler, Mishra, and Shin, 2009); (3) Self-Efficacy of Pre-Service Teachers' Literacy Abilities (Gallavan, Boles, and Young, 2007); and (4) Knowledge and Use of Reading Strategies (Akyol and Ulusoy, 2002). All items from these surveys were used, with exception of section 2 (The Survey of Pre-service Teachers' Knowledge of Teaching and Technology: Koehler, Mishra, and Shin, 2009). Only questions from the literacy and teaching strategies sections were utilized.

The dependent variables are shown as follows in Table 5: (1) beliefs of pre-service teachers regarding their own reading and writing; (2) self efficacy of pre-service teachers regarding their abilities to be effective literacy leaders; (3) self-efficacy of pre-service teachers in regards to literacy instruction and; (4) knowledge and belief system regarding the content of literacy. The table shows how the surveys map onto the dependent variables.

Table 5. Dependent Variables and Measures

Dependent Variables		Surveys		
	Language Arts Grid (Cunningham, Zibulsky, Stanovich & Stanovich, 2009)	Survey of Pre-Service Teachers Knowledge of Teaching and Technology (Koeher, Mishra, & Shin, 2009)	Self-Efficacy of Pre-Service Teachers' Literacy Abilities (Gallavan, Boles, & Young, 2007)	Knowledge of Use of Reading Strategies (Akyol & Ulusoym 2010)
Self-Efficacy in their Literacy Skills			X	
Belief System regarding Teaching of Literacy	X			
Knowledge of Content in the Area of Literacy	X			X

One of the four dependent variables is knowledge. The knowledge base was initially measured in the first portion of the survey as provided in APPENDIX D and was open-ended and related to what the pre-service teachers knew and believed to be solid instructional plans for reading in their future classrooms. This gave a clear picture of the pre-service teachers' belief system regarding teaching literacy.

Silverman (2005) wrote about the importance of the researcher matching the method with the information he or she desires to obtain. Because researchers are trying to understand a variety of perspectives in relationship to a particular treatment,

they use an alternate way to examine a particular event or treatment in order to fully understand the participants' experiences, perceptions, and beliefs. The self-report method used by Cunningham, Zibulsky, Stanovich and Stanovich (2009) in the Literacy Arts Activity Grid is felt to be a more reliable measure of teachers' beliefs than even a Likert scale, as the work of Bos et al.,(2000) demonstrated that participants tend to endorse all items similarly which can result in low reliability estimates (as cited in Cunningham, Zibulsky, Stanovich & Stanovich, 2009). This portion of the survey provided for a detailed response to their knowledge and beliefs about how they will structure literacy instruction through classroom practices for a ninety-minute block of reading, which is currently mandated in the State of Florida. For the middle and high school pre-service teachers, it will ascertain how literacy will be incorporated into their content area. This method of gaining information was used in the study of Cunningham, Zibulsky, Stanovich and Stanovich (2009), but was limited to the knowledge of in-service teachers.

In addition, Fang (1996) found that participants are often forced to agree or disagree with statements without being given an opportunity to elaborate on or give reasons for their choices. Also, when using a Likert scale, participants can respond carelessly without fully reading each statement. And most importantly, participants may respond in a manner they perceive a pre-service teacher should respond (social desirability validity issue), such as seen in the work of Helmes and Holden (2002) (as cited in Cunningham, Zibulsky, Stanovich & Stanovich, 2009). Although the Likert Scale was used in the latter portion of the survey to ascertain knowledge of specific reading strategies, the researcher utilized this open-ended survey as an additional way of collecting information and reducing these validity issues. Although no data are available on the reliability of the survey, it allowed for the researcher to translate the participants' responses to quantitative data that gave a true picture of the pre-service teachers' knowledge of content.

The second section of the survey is entitled *The Survey of Pre-service Teachers' Knowledge of Teaching and Technology* (Koehler, Mishra, & Shin, 2009) and was used in part to determine the pre-service teachers' perceived abilities to teach literacy to their future students. Reliability studies (Schmidt et al, 2009) showed an internal consistency

(Cronbach's alpha) of.75. The pedagogy knowledge portion and content knowledge portions were at .84 and .85 alpha levels, respectively. This survey portion used a 4-point Likert scale (4 strongly agree, 3 agree, 2 disagree, and 1 strongly disagree), to assess the participants' beliefs about themselves, not to their actual knowledge of content. Survey scores range from 13.00 to 52.00.

The third section of the survey is *The Self-Efficacy of Pre-Service Teachers' Literacy Abilities* (Gallavan, Boles, & Young, 2007), provided additional data relating to the levels of self-efficacy of the pre-service teachers in terms of their own reading and writing skills and their ability to teach reading and writing. Questions were based on literacy concerns that the professors in the Education Department were seeing in the reading and writings of their own students. It was piloted at The University of Arkansas in the teacher education program. Again, a Likert Scale (4 strongly agree, 3 agree, 2 disagree, and 1 strongly disagree) was used. Although no validity data were given, the survey was piloted and used at The University of Arkansas in the teacher education program. Scores of this portion of the survey range from 8.00 to 32.00.

The final section of the survey is *The Knowledge and Use of Reading Strategies* (Akyol & Ulusoy, 2002). This instrument determined the knowledge and use of reading strategies pre-service teachers currently use in their own readings. The survey was pilot tested on 61 pre-service teachers to ascertain the reliability level. The reliability analysis showed a Cronbach's alpha was .90.   Scores from this section of the survey range from 38.00 to 152.00.

Experimental Procedures

Design. In this study, an experimental between-groups design was employed. Creswell (2008) defines this as "the most rigorous and strong experimental design …equating the groups through random assignment" (Creswell, 2008, p. 313). Random assignment allowed for major threats to internal validity to be eliminated.

Procedures. Three professors volunteered to assist in the research by providing subjects from the following classrooms: Early Elementary Reading (RED 4310), Elementary Education Reading (RED 4510), and Secondary Education Reading class

(RED 4335). As seen in Table 4, following informed consent, approximately half of the participating students were randomly assigned to the Reflections Interactive Notebook intervention group (38 students) and half were assigned to Reader's Response Journal intervention group (27 students). In total, 65 students were in the two intervention groups. Any student not wishing to participate remained in the classroom with the assigned professor received "business as usual" instruction through use of the Reader's Response instruction.

Reflections Interactive Notebook Intervention. Each group received instruction in responding to literature they were reading through their coursework, but the Reflections Interactive Notebook intervention group were in an adjacent classroom receiving reading instruction and responding via the Reflections Interactive Notebook.

All students received 30 minutes of instruction one time per week for a total of 6 weeks. The intervention, in its entirety, is found in APPENDIX E and is based upon the best practices discussed in the literature review. The researcher was the sole instructor of the Reflections Interactive Notebook intervention group. The students in the Reflections Interactive Notebook group responded using the notebook given to them by the researcher (APPENDIX E).

Reader's Response Journal Intervention. The Reader's Response intervention group received instruction from their regularly assigned instructor. Participants in the Reader's Response group responded to assigned readings from their coursework. The professors in each of the classes provided 30 minutes of response time per week for a total of 6 weeks. A list of prompts based on the best practices for literacy instruction (APPENDIX J) were given to the professor and were utilized with the Reader's Response group and anyone not willing to participate in the study. This intervention was structured to provide for the same type of literacy instruction as per the course syllabi. The Reader Response Intervention group was instructed to respond via journals to readings and subsequent prompts throughout their coursework.

Data Analysis

This study examined which intervention group (Reflections Interactive Notebook group and the Reader's Response Journal group) resulted in improvements in pre-

service teachers' knowledge of content (or knowledge base), self-efficacy in their own reading and writing skills, as well as their abilities to teach reading and writing to students, and their beliefs of literacy instruction. For analysis of the first portion of the survey (Language Arts Grid), which was open ended, descriptive statistics were used. Visual representations in the form of frequency charts, along with descriptive statistics were shown pre- and post-survey.

For the other three portions of the survey, a repeated measures MANOVA was used to examine group differences on the following dependent variables: beliefs, self-efficacy, and knowledge and belief system of literacy instruction content utilizing the Wilk's Lambda. Because of the violation of Box's M, three separate ANOVAS were run as well, utilizing the Bonferonni correction method (Stevens, 1992).

Post-hoc pair-wise comparisons were used to determine whether or not only one, two, or all dependent variables improved. This technique was used to identify the specific dependent variables that contributed to the significant overall effect of the MANOVA. Mean results from the tests are shown in a table such as the one in Table 6.

TABLE 6. Example of Results (Survey Sections 2, 3, and 4)
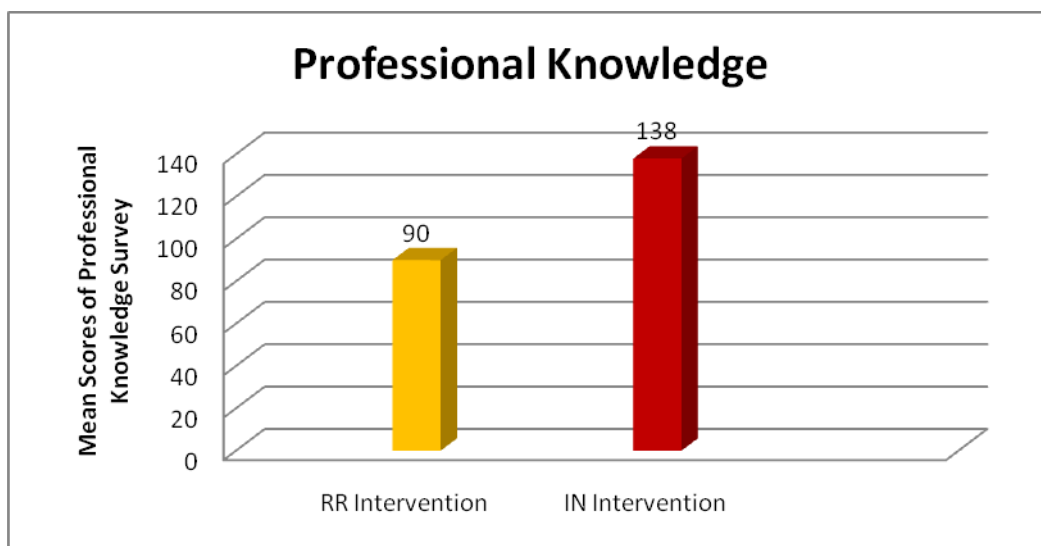
Interpreting results

Results are reported in the manner that is consistent with Table 7. Sum, mean, and standard deviation are calculated. Rather than grouping the activities into categories that are constructed a priori, Excel was used to code responses based on the actual knowledge of the pre-service teachers.

Table 7 shows the responses to the open ended survey that assessed how teachers would spend their time teaching literacy. This was utilized in addition to a Likert Scale because individuals tent to endorse all items similarly which can result in low reliability estimates (as cited in Cunningham, Zibulsky, Stanovich & Stanovich, 2009). Again, as noted, these categories were not set as a priori categories, but use the data analysis method of Cunningham, Zibulsky, Stanovich, and Stanovich (2009).

TABLE 7. Example of Responses to Survey Section 1

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Figure 1
Mean Amount of Instructional Time That All
Teachers (N = 121) and Those With an Extreme
Instructional Emphasis (literature emphasis, n = 22;
phonics emphasis, n = 33) Would Prefer to Allocate
to Different Language Arts Activities
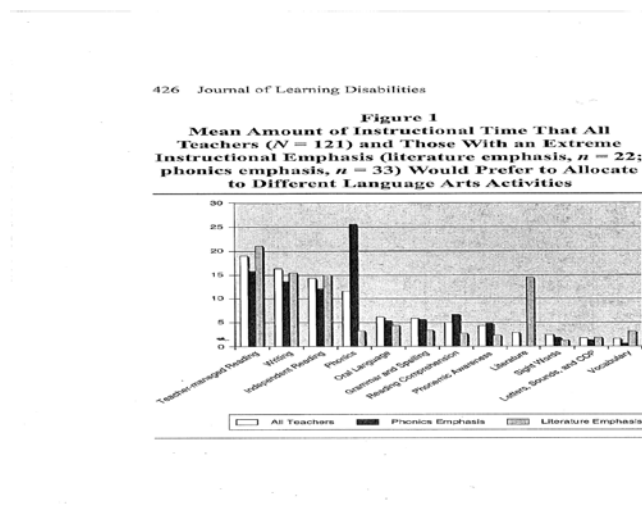
Fidelity and Reliability

Excel© was used to code for activities and then generate different categories of literacy instructional practice. Colleague examination and confirmation of the data

during the data analysis is important for fidelity. Although I initially completed the coding, a group of inter-raters (doctoral students) were utilized to make judgments concerning the type of instruction that the pre-service teachers listed on 20% of answers received from open-ended survey. This is based on the self-report method used by Cunningham, Zibulsky, Stanovich & Stanovich (2009) in the Literacy Arts Activity Grid. 90% of the codings must have inter-rater reliability. If raters disagree, a consensus must be found. This will be done through consulting the resources utilized in the literature review and discussion.

The analysis of the pre-test was compared to the post-test after the 6-week intervention to see if there were changes in the pre-service teachers' responses to what instruction will be utilized in their literacy instruction.   Best practices methods were considered those written about in the literature review.

TABLE 8.   Example of Report Results of Survey Sections 2, 3, and 4
Average Percentage of Time Pre-service Teachers Would Spend on Different Language Arts Activities.

Activity	Sum	Mean	SD
Teacher-managed reading			
Writing			
Independent reading			
Phonics			
Oral Language			
Grammar and Spelling			
Reading Comprehension			
Phonemic Awareness			
Literature			
Sight Words			
Letters, Sounds, and Concepts of Print			
Vocabulary			
Assessment			

For the second, third, and fourth sections of the surveys, descriptive statistics using SPSS are used to represent the results from the Likert Scale portion of the survey. In addition, because there are three dependent variables (knowledge base, beliefs, and self-efficacy), MANOVA is used.

CHAPTER 4

RESULTS

This study examined the effects of two interventions, an innovative Reflections Interactive Notebook and a traditional Reader's Response Journal, on pre-service teachers' beliefs, self-efficacy, and knowledge of literacy instruction. Measures of these dependent variables were collected from 65 pre-service teachers at Florida State University.

To determine the differences of these two interventions, two different types of analyses were completed. First, the results of the Likert scale portion of the survey are presented using a multivariate analysis of variance (MANOVA) on the pre-service teachers' beliefs, self-efficacy, and knowledge of literacy instruction. Second, descriptive results from the open-ended response portion of the survey are presented to measure the pre-service teachers' belief systems regarding the teaching of literacy, which is based on their knowledge of literacy content. This chapter reports the results of the statistical analyses of the data collected over a six-week period.

Procedural Fidelity and Reliability

Fidelity of instruction for both interventions was assessed via the Reflections Interactive Notebook Fidelity Checklist (APPENDIX H) and the Reader's Response Intervention Fidelity Checklist (APPENDIX I). Use of an Interactive Reflections Notebook Evaluation Rubric (APPENDIX F) was used for scoring these notebooks. This allowed for a fair grade, which was weighted the same and given for all students in either the Reflections Notebook Intervention Group or the Reader's Response Intervention Group. The instructors of the three courses used the Reader's Response Rubric provided (APPENDIX G) to evaluate the pre-service teachers in this intervention group. The researcher utilized the Reflections Interactive Notebook Rubric (APPENDIX F) to evaluate pre-service teachers in this intervention group. The three instructors and the researcher were required to have an inter-rater agreement on 15% of all submissions. Five of the submissions by students were not given the same score by

the raters, yet after discussion, a consensus was met.   Agreement was reached on 100% of all submissions.

For fidelity purposes, 15% of both intervention groups' instruction was required to be monitored by a third party. In actuality, 33% of the Reflections Interactive Notebook sessions and 33% of the Reader's Response sessions were monitored, and inter-observer agreement was used. Two graduate students were trained to identify the components of each session (APPENDIX H and I) and determine the length of each session. One hundred percent of all sessions in both intervention groups were rated at a high level of implementation (2 out of 2). A copy of the fidelity checklist used is provided in APPENDIX H and I.

Coding Reliability

The researcher initially completed coding of the open-ended section of the survey. Excel© was used to code for activities and then generate different categories of literacy instructional practice. Colleague examination and confirmation of the data during the data analysis was made concerning the type of instruction that the pre-service teachers listed on 20% of answers received from open-ended survey. Discussion amongst researcher and colleagues ensued in 100% inter-rater agreement on codings.

Reporting Methods

In the first section, report of descriptive statistics from the Likert Scale portion of the survey are given as results from the research questions and hypothesis (Research Questions 1, 2, and 3) that relate to the beliefs, self-efficacy, and knowledge of the pre-service teachers in the area of literacy. This is followed by the MANOVA analyses of the results from the Likert portion of the surveys, which were given at the start and completion of the six-week intervention period. A description of the data will follow the results.

Secondly, the results of the descriptive statistical analysis of the open-ended portion of the survey are reported relating to knowledge of the pre-service teachers, along with a visual representation in the form of an area chart. This section includes the statistical analysis and results from the research question (research question 3) that relates to the knowledge of content and belief systems of the pre-service teachers and will also be followed by a description of the data.

Results of MANOVA

A Multivariate Analysis of Variance (MANOVA) was conducted to answer research question 3 by evaluating the effect of two interventions, the Reflections Interactive Notebook and the Reader's Response Journals, on pre-service teachers' beliefs, self-efficacy, and knowledge of literacy content. Because the dependent variables have a theoretical correlation, MANOVA was used.

Before reading the results of the MANOVA, the assumptions in this type of statistical testing must be examined (Green & Salkind, 2011). The first assumption is that data fit a normal sample distribution. The dependent variables (pre-service teachers' beliefs, self-efficacy, and knowledge) are normally distributed at all levels of the two independent variables (Reflections Interactive Notebooks and Reader's Response Journals). Table J1 (Appendix J) indicated that 3 of the 6 values of skewness and kurtosis fell between +1 and -1, the 3 values were greater than +1 or lower than -1. Both Weinfurt (1995) and Green and Salkin (2011) report that it is difficult to imagine this assumption could be met, but that MANOVA is a "robust procedure" (Weinfurt, 1995, p. 254) that can withstand the violation of this assumption.

The next assumption relates to homogeneity of covariance, which should be seen among the dependent variables across the levels of the independent variables. The sample sizes in this study of the two intervention groups were unequal, as the Reflections Interactive Notebook group had 39 participants, and the Reader's Response Journal group had 26 participants. Box's M test, as seen in APPENDIX J, was utilized for examining homogeneity and was significant, $F (18, 44414.24) = 4.46$, $p < .05$. This significance might be due to the violation of the multivariate analysis assumption of

Box's M test. Stevens (1992) noted that the use of MANOVA is a strong statistical analysis to utilize as long as the groups are approximately equal (must be largest/smallest<1.5). In this study, the ratio of Reflections Interactive Notebook participants to Reader's Response Journal participants is nearly a one-to-one ratio.

The final assumption relates to independence of scores. In this study, as in most educational research studies, the scores are not independent. Although Box's M was significant and not all assumptions were met, the "robust procedure" (Weinfurt, 1995, p. 254) that Weinfurt (1995) refers to and more currently is written about in Green and Salkin (2011) is taken into account.

When examining the dependent variable of belief in ability to teach literacy, a score could range from 13.00 to 52.00. Self-efficacy of the pre-service teachers in terms of their own reading and writing was a score that ranged from 8.00 to 32.00. The variable of knowledge of reading strategies pre-service teachers currently use in their own readings ranged from 38.00 to 152.00

In research question 3, it was investigated whether or not pre-service teachers were impacted differently in the areas of belief system, self-efficacy, and knowledge of literacy content. The omnibus test utilized as shown in Table 9 was Wilk's Lambda. This analysis was run to determine significance of the two groups on three dependent variables: beliefs, self-efficacy, and knowledge of literacy content. Significant differences were found with the two groups on each of the dependent measures: Wilks's λ= .896, F(3,124)=4.811, p, .01   An effect size index, η^2 (eta squared), which ranges from 0 to 1, can be interpreted as the proportion of variance of the dependent variable that is related to the factor (Green & Salkind, 2011). The multivariate η^2 based on Wilk's Lamda is .104, which is a small effect size.

Table 9. Multivariate Test Results

Effect		Value	F	Hypothesis df	Error df	p	Partial Eta Squared
Intercept	Wilk's Lambda	.013	3248.633	3	124	.000	.987

Table 9.   Multivariate   Test   Results
(Continued)   .
Intervention   Wilk's   896   4.811   3   124   .003   .104

Comparisons on each dependent variable were conducted as follow-up tests to the MANOVA to determine statistical significance of a relationship. The use of the Bonferroni method (Stevens, 1992) was used, and each ANOVA was tested at the .016 level (.05 divided by the number of ANOVA's conducted). Tables 10 shows the Analysis of Variance for Between Subjects.

Table 10. Analysis of Variance for Between Subjects

Source		df	Mean Square	F	Sig.	η^2
Group						
	Beliefs	1	148.22	6.393	.01*	.414
	Knowledge	1	1146.34	2.742	.10	.240
	Self-Efficacy	1	289.50	12.691	.001*	.284
Group*Type						
	Beliefs	1	2.094	.90	.001*	.060
	Knowledge	1		.026	.000*	.053
	Self-Efficacy	1		2.988	.023*	.403

Note: p<.05 level

Analysis of the between group factors showed there was significance in regards to type of intervention and group. Although the MANOVA revealed significant results, due to the violation of Box's M, it was important to conduct post-hoc comparisons. First, the pair-wise comparison of the improvement of mean values of the Reflections Interactive Notebook in terms of the dependent variable beliefs is 7.87 and the Reader's response notebook equal 7.38, which is slightly less. This suggests that those interventions are not significantly different from each other in terms of beliefs. The second phase of the pair-wise comparisons relating to self-efficacy shows a value of a

number for the Reader's Response Journal group that is clearly greater (6.81) than the improvement in the Reflections Interactive Notebook Groups at 3.64. This implies that there is a significant difference in the improvement in means of the Reflections Interactive Notebook group and the Reader's Response Journal group. Thirdly, the pair-wise calculations between the Reflections Interactive Notebook and the Reader's Response Journal group in terms of knowledge of literacy content is also greater for the Reader's Response Journal group (24.14) versus the Reflections Notebook group (20.14) demonstrating that a difference exists.

Because the omnibus test indicated there were significant differences regarding the two intervention groups, three paired-samples t-tests were computed to assess differences between the means of the two interventions for each dependent variable (beliefs, self-efficacy, and knowledge of literacy content) at each time period. Table 11 reveals within subjects differences.

Table 11. Mean Scores for Beliefs, Self-Efficacy, and Knowledge by Intervention (Within Subjects)

	Condition			
	Reflections Interactive Notebook (1) (n= 39)		Reader's Response (2) (n=26)	
Beliefs	M	SD	M	SD
Pre	37.72	4.811	35.80	4.60
Post	45.59	5.10	43.25	4.71
Improve	7.87		7.38	
Self-Efficacy				
Pre	25.92	3.63	21.42	8.42
Post	29.56	2.82	28.23	3.31
Improve	3.64		6.81	
Knowledge				
Pre	102.08	24.17	95.46	21.7
Post	122.23	17.28	119.85	17.57
Improve	20.15		24.39	

When analyzing within subjects (Table 11) differences in mean ratings of beliefs for the Reader's Response Journal were significantly different between times 1 (pre-

survey) and 2 (post-survey), *t* (-6.495), p<.01. Ratings of self-efficacy for the Reader's Response Journal were significantly different between times 1 (pre-survey) and 2 (post-survey), *t* (-3.835), p<.01. Differences in mean ratings of knowledge for the Reader's Response Journal were significantly different between times 1 (pre-survey) and 2 (post-survey), *t* (-6.097), p<.01.

Descriptive Data

An open-ended survey was utilized to fully understand the participants' experiences, perceptions, and beliefs (Silverman, 2005). The self-report method used in the Literacy Arts Grid (Cunningham, Zibulsky, Stanovich, & Stanovich, 2009) is a more reliable measure of teachers' knowledge and beliefs than a Likert Scale, as the work of Bos et al. (2000) established. It was found that participants endorsed all items similarly which results in a low reliability level. Inclusion of this open-ended survey will provide a reliable and detailed picture of the pre-service teachers' knowledge and beliefs about how they will structure literacy instruction in their classes.

First, it was found that during the pre-survey, the pre-service teachers minimally responded to the open-ended portion of the survey that called for them to list activities and skills that would be taught during a two hour block of language arts (early and elementary education) or literacy activities and skills used in the secondary classroom, as can be seen by Tables 11 and 12.

Responses from the post-survey were much for frequent for both intervention groups, yet the Reflections Intervention Notebook group had a much higher response rate, and remarks given coincided with research-based instruction noted in the literature review.

Table 12. Pre-and Post Results from Open-Ended Survey (Reflections Interactive Notebook)

**Open-Ended Survey Results
Reflections Notebook Intervention**

Pre-Survey   Post-Survey
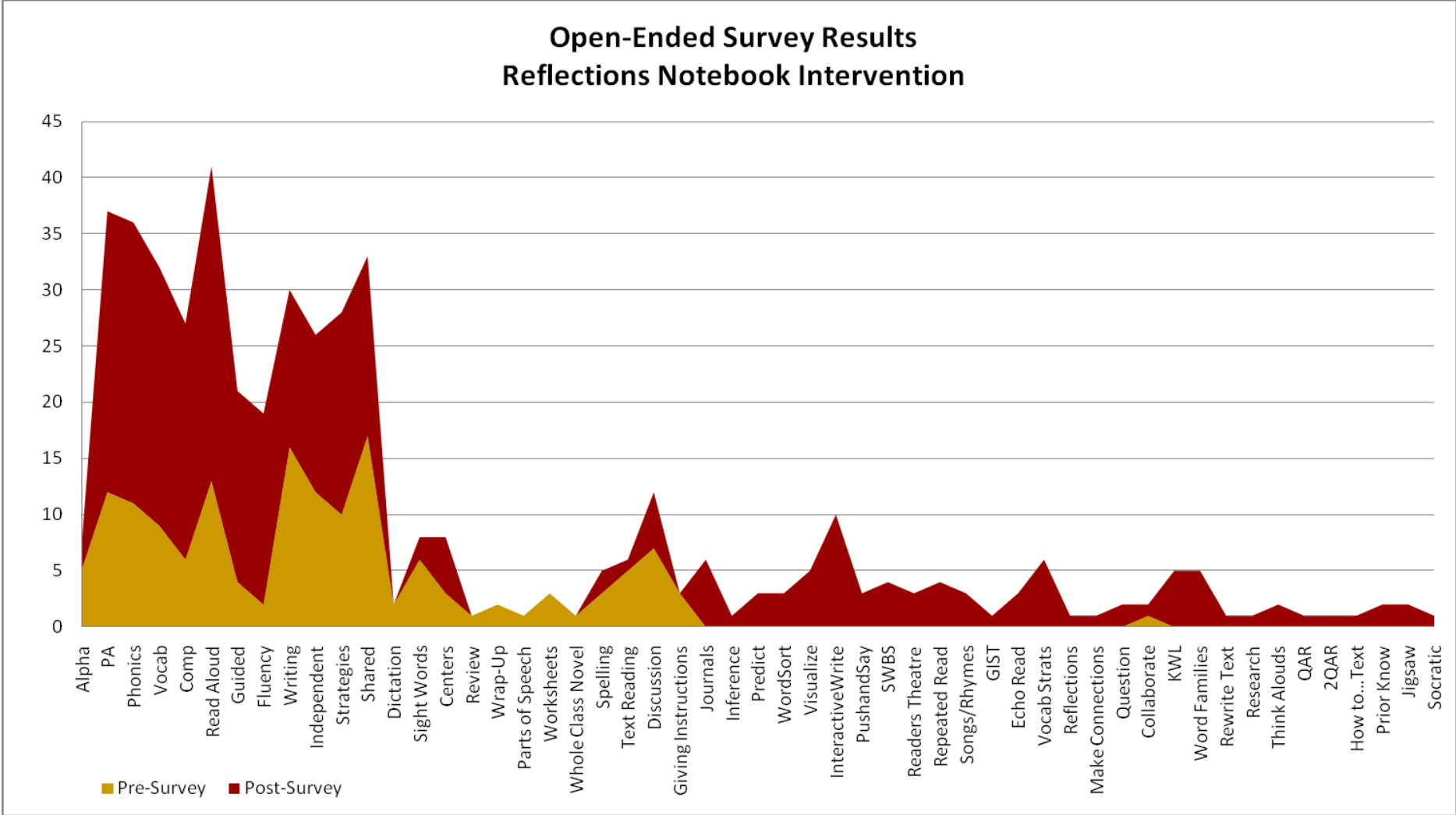
Table 13. Pre-and Post Results from Open-Ended Survey (Reader's Response Journal)

Open-Ended Survey Results
Reader's Response Journals

Legend: Pre-Survey, Post-Survey

Categories (x-axis): Alpha, PA, Phonics, Vocab, Comp, Read Aloud, Guided, Fluency, Writing, Independent, Strategies, Shared, Dictation, Sight Words, Centers, Review, Wrap-Up, Parts of Speech, Worksheets, Whole Class Novel, storytell, Spelling, Text Reading, Journals, assessment, Basal Reader, Video, Notetaking, Morning Message, Basal Series, Guided, Writer's Workshop, KWSL, Whiteboard Debate

APPENDIX J shows the descriptive statistics from then intervention groups. Results from the Reflections Interactive Notebook group is seen in J3 and the Reader's Response Group in J4.

Description of Open-Ended Responses

When answering the survey pre-intervention, both the students in the Reader's Response and Reflections Interactive Notebook Intervention Groups answered with minimal responses. In addition, it the type of responses confirmed by Berliner (1987) regarding the idea that pre-service teachers revert to their training as school-aged children when considering the type of literacy instruction that will be implemented in their classrooms. Responses were vague and not strongly revolving around current research-based practices as were discussed in the literature review.

Reflections Interactive Notebooks. For the Reflections Interactive Notebook intervention group, 152 out of a possible 390 responses (38.9% of possible responses) were given for the pre-survey as opposed to 307 out of 390 (78.7% of possible responses) for the post-survey. The pre-survey responses were focused around their decisions to include phonics (12 responses), vocabulary (11 responses), guided reading (13 responses), writing (16 responses), independent reading (12 responses), reading strategies (10 responses), shared reading (17 responses). The responses of review, wrap-up, giving directions, teaching whole-class novels, reading text (without support) and worksheets were given on the pre-survey, but were not mentioned on the post, indicating a move toward researched-based literacy practices.

When analyzing the post-survey responses for the Reflections Interactive Notebook group, the aforementioned literacy areas sums increased (phonics increased from 12.00 to 25.00, vocabulary increased from 11 .00 to 23.00, comprehension from 9.00 to 21.00, guided reading from 13.00 to 17.00, independent reading from 12.00 to 14.00, and reading strategies from 10.00 to 18.00).

The two areas of literacy that decreased were writing (16.00 to 14.00) and shared reading (17.00 to 16.00). Although a decrease, the pre-service teachers in this intervention group added Interactive Writing (10.00), Reflections Interactive Notebooks

(1.00), and Journals (6.00), which is a gain of 15.00 for writing activities and demonstrates the students' understanding of research-based practices by providing a more specific response. Regarding shared reading practices, responses given were also more explicit and research-based in nature. Echo/choral reading (3.00), and think-alouds (2.00) give the area of shared reading a gain of 4.00.

Additional responses of note include the importance of reading aloud (28.00 responses) and such responses as assessment, teaching students how to read texts, and very specific, explicit responses in the area of researched-based reading strategies (inferencing, predictions, visualizing, summarizing, GIST summary, making connections, questioning, activating prior knowledge through use of such techniques as GIST and KWL organization charts). Students also gave more specific responses in the teaching of phonemic awareness and phonics by adding songs and rhymes, word sorts, and push and say to their responses. Reader's Theatre and repeated readings were listed as curriculum activities, which gave more thorough researched-based responses for the area of fluency.

Reader's Response Journals. For the Reader's Response Intervention group, 77 out of a possible 260 responses (29.6% of possible responses) were given for the pre-survey as opposed to 111 out of 260 (42.6% of possible responses). The pre-survey responses were centered on their decisions to include the five areas of reading. Phonemic Awareness (15.00), phonics (11.00) vocabulary (11.00), and comprehension (12.00). The responses of dictation, reading strategies, review, wrap-up, grammar, story telling, and videos given on the pre-survey.

When analyzing the post-survey responses for the Reader's Response Group, not only did the aforementioned literacy areas sums increase (phonics increased from 6.00 to 11.00, vocabulary increased from 10.00 to 11.00, comprehension from 6.00 to 12.00, phonemic awareness from 4.00 to 15.00). Four areas remained unchanged: alphabet recognition (2.00), whole-class novels (1.00), reading of text (1.00) and assessment (1.00).

The areas of literacy that decreased were read alouds (10.00 to 9.00), independent reading (7.00 to 5.00), reading strategies (2.00 to 0.00), and sight word instruction (2.00 to 1.00).

Additional responses of note included journals (6.00), writer's workshop (2.00), activating prior knowledge through organizers (1.00), and basal reading series (2.00).

In summary, both groups of participants rated themselves higher in beliefs, self-efficacy, and knowledge of content from the beginning to the end of the two interventions. Analysis of group means revealed that the participants in the Reflections Interactive Notebook Group rated themselves higher at both the start of the interventions and at the end. Because of this, there is minimal difference in mean differences, as evidence by Table 11.

In terms of the open-ended survey, the percentage of researched-based responses was significant. The Reflections Interactive Notebook group supplied 36% more researched-based responses than the Reader's Response group. For the Reader's Response intervention group, participants increased from 29.6%(pre-test) to 42.6% (post-test) in supplying researched-based practices. The Reflections Interactive Notebook intervention group supplied 38.9% (pre-test) of possible responses to the open-ended survey, as compared to 78.7% on the post-test.

CHAPTER 5
DISCUSSION

The purpose of this experimental study was to test the difference between use of two interventions, a Reader's Response Journal and a Reflections Interactive Notebook, and the difference in the impact on pre-service teachers as it relates to the following: beliefs, self-efficacy, and knowledge of content in the area of literacy. Sixty-five pre-service teachers from the Teacher Education Program at Florida State University were randomly assigned to one of the two experimental groups.

After being assigned one of the interventions, students were given a pre-test in the form of open-ended and Likert scale questions to determine their beliefs, self-efficacy, and knowledge of the content area of literacy. Then, each group was given the assigned six-week intervention and the same survey as a post-test.

. After determining a significant effect in MANOVA, Wilks's λ= .896, F(3,124)=4.811, p<.01, = .104.   Between subjects analysis for each of the dependent variables were run, and all dependent variable were found to be significant between the pre-and post tests: for belief scores: F (3, 126)=29.71, p<.01, = .414, for self-efficacy scores: F(3,126)= 16.62, p<.01, η^2 = .284, and for knowledge: F93,126), p<.01, η= .240. Post hoc pairwise analyses for all three dependent variables were completed to find which of the two interventions (Reflections Interactive Notebook or Readers Response Journals) affected the pre-service teachers' belief system, self-efficacy, and knowledge of literacy content most strongly and mean differences are given. Results found that the Reflections Interactive Notebook Group participants showed a number of positive differences in responding to their future literacy curriculum. It is speculated this could be due, in part, to the nature of the explicit instruction of research-based practice, along with the actual personal writings and practice of strategies that allowed for knowledge of literacy content and a strong belief system in creating and implementing literacy curriculum.

CHAPTER 5
DISCUSSION

Findings and Pedagogical Implications

When discussing the results from the two interventions given, as reported in the results section, both the Reflections Interactive Notebook and the Reader's Response Journals revealed significant results. It is critical to return back to the research questions to make clear the findings and determine what this means for the field of teacher education.

Research Question 1: What are the levels of self-efficacy of pre-service teachers regarding their own reading and writing processes?

Research Question 2: What is the self-efficacy level of pre-service teachers regarding their abilities to be effective literacy leaders?

Research Question 3: Do the explicit instruction techniques of Interactive Notebooks and Reader's Response Journals impact pre-service teachers differently in the areas of:

- ✓ Belief System
- ✓ Self-Efficacy
- ✓ Knowledge of Literacy Content

Regarding research questions one and two, the data clearly reveals that both interventions increased on the Likert scale portion of the survey. Only marginally significant differences were found in the actual change in the Reflections Interactive Notebook intervention group and the Reader's Response Journal intervention group. What is worthy of discussion is the high level of self-efficacy of participants, pre-interventions. The lowest percentage of scores regarding self-efficacy of the pre-service teachers' reading and writing and their abilities to teach literacy was fairly high at 62%.

Reflecting on the research regarding self-efficacy in the literature review, Bandura (1993) clearly states a higher level of self-efficacy is best. But what remains to be seen is how this relates to pre-service teachers. Is a higher self-efficacy in pre-service teachers related to false beliefs? Or is it related to acquisition of knowledge?

What needs to be considered is conducting research regarding self-efficacy levels for pre-service teachers. It is known through the review of literature (Gibson & Dembo, 1984) that teacher self-efficacy influences specific classroom behaviors that yield stronger student outcomes. This study was limited in the fact that students listed researched-based classroom practices they <u>anticipate</u> utilizing when they become in-service teachers. It could be surmised that the nature of the hands-on activities and practice in the Reflections Interactive Notebook intervention group led to a significantly higher percentage (38%) of researched-based practices.

Future research should examine the possibility through longitudinal studies that follow pre-service teachers after their experience in a teacher education program. Do levels of self-efficacy change when they enter the classroom? Will these pre-service teachers actually employ these strategies with their students, and how will this affect their belief system and levels of self-efficacy in terms of teaching literacy? Will the participants in the Reflections Interactive Notebook intervention group employ more researched based strategies? Longitudinal studies that follow students over the course of years 1-3 (minimum) to see which are retained and continue to teach and the reasons behind these decisions.

The data that show the most promise is that from the open-ended survey. This portion of the survey provided a detailed response revealing the knowledge and belief systems of the pre-service teachers, and how this will affect their structuring of literacy instruction through classroom practices. Fang's (1996) study, revealed that participants are often forced to agree or disagree with statements without being given an opportunity to elaborate on or give reasons for their choices. Also, when using a Likert scale, participants can respond carelessly without fully reading each statement. And most importantly, participants may respond in a manner they perceive a pre-service teacher should respond (social desirability validity issue), such as seen in the work of Helmes and Holden (2002) (as cited in Cunningham, Zibulsky, Stanovich & Stanovich, 2009). The opportunity for students to respond in writing regarding their belief system yielded promising results.

First, an overview of the researched-based practices found in the literature

review from the three top sources (NRP, 2000; Scarborough, 2001; and Cowen, 2003) is presented in Figure 7.
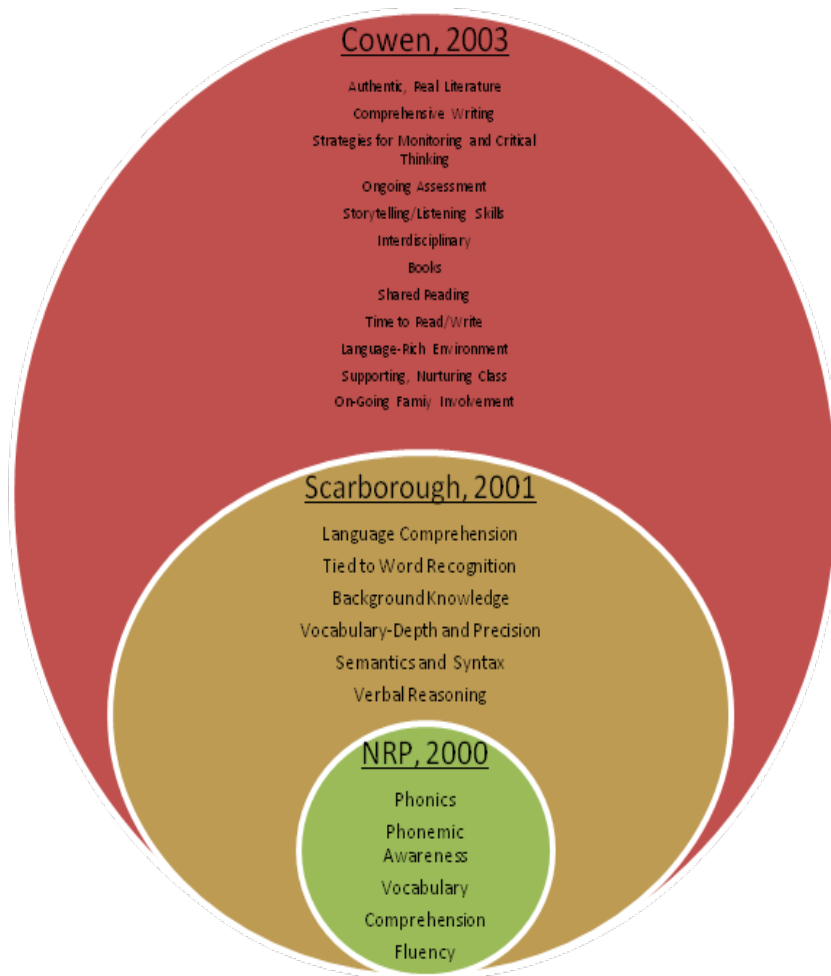
Figure 7. Current Model for Developing a Successful Literacy Program

This model is a visual representation of what was reported in the literature review. When considering what skills need to be included in literacy instruction, the researched-based practices that yielded reliable results in current research studies reflect the Vygotskian Theory of Constructivism (1987). Learning is a social phenomenon that should allow for interactions between the students and teacher. Literacy activities must provide for students to be fully involved and need to allow for

students to construct their own meaning by participating and reflection. In addition, as was the case with the Reflections Interactive Notebook intervention, modeling of the strategies by the teacher is crucial. Despite what is revealed in the literature view regarding the teaching and modeling of reading strategies, it is still seen, almost two decades after findings, that there has been very little change towards this type of instruction (Pressley, 1998).

Although both the Reflections Interactive Notebook and the Reader's Response showed significant effects in this study, the open-ended survey results give a clear picture of how these two interventions differed. In keeping with Vygotsky's theory, the Reflections Interactive Notebook allowed for students to not only learn about and reflect on the content knowledge of literacy, but it allowed for explicit instruction and practice, allowing for the pre-service teachers in this intervention group to construct their own knowledge of literacy instruction.

When students from the Reader's Response Journal responded on the open-ended portion of the post-test, the answers were mostly limited to the inner circle of Figure 7 (NRP, 2000), as the students planned to teach, very generally, the five areas of reading. Many students, as is seen in the results section, failed to even supply answers for this portion, or only supplied activities for a few of the ten possible responses.

The Reflections Interactive Notebook responses were not only more frequent in number, but very specific research-based responses were given. In terms of the model in Figure 7, the responses were much more far reaching, as they ranged from not just the basic tenets of literacy instruction in the inner circle (NRP,2000), but included instructional methods in the middle circle (Scarborough, 2001) and the most comprehensive design of all by Cowen (2003). Participants included answers such as "Fluency by teaching reader's theater and repeated readings"; "Push and Say for phonics"; "Word sorts for vocabulary"; and "Interactive Writing".

As examples, the responses coincided with the research from such studies seen in the literature review that were conducted by Anthony and Lonigan (2004) which stated that "phonological sensitivity" is crucial to teaching reading and Lyon, Fletcher, Torgeson, Shawitz, and Chhabra (2004) who proved the theory that phonics instruction must be explicit. The students responded by including various methods of teaching

fluency such as teacher modeling of reading aloud, guided reading, and Reader's Theater, as was researched and found effective by Raskinski (2007). Responses also included generating and answering questions, using graphic organizers, summarizing, and multiple-strategies (NRP, 2000; Pressley et al, 2007). Writing and speaking were responses, which are also researched-based practices (Foorman & Moats, 2004).

This leads back to the Model for Learning to Teach, which allows for creating a successful learning environment in a rapidly changing world--a world with very diverse learners training for a wide variety of occupations (Myers, 1996). As seen by Figure 8, the studies of Darling-Hammond and Baratz-Snowden (2007) concluded that pre-service teachers need knowledge. This includes not only knowledge of content, but of pedagogy, social contexts, and various types of students.

In addition, there needs to be vision. This vision includes images of good practice that guide instruction. The third part of this model includes practices. Pre-service teachers need to be armed with a vast amount of researched-based strategies, which will allow for them to reach and teach all students. Fourthly, pre-service teachers need to be introduced to dispositions. These are habits of thinking and actions taken regarding teaching and children. As seen in the literature review and is added to Figure 8, (Bandura, 1986; Shell, Murphy, Bruning, 1989; Gorrell & Capron, 1990; Cannon & Scharmann, 1996; Hoy & Spero, 2005), this affective domain should also include a strong self-efficacy in terms of teaching others and literacy practices of self. Finally, included in the model are tools, which are not only conceptual but practical resources for use in the classroom.

Despite the fact that the innovative Reflections Interactive Notebook and the Reader's Response Journal are both based on Vygotsky's theory (1987), it can be surmised that the strong results from the open-ended portion of the survey from the participants in the Reflections Interactive Notebook group could be due, in part, to the nature of the explicit instruction of research-based practice. This instruction, coupled with the actual personal writings and practice of strategies, allowed for pre-service teachers to gain the valuable knowledge of literacy content, a strong self-efficacy of their own literacy skills and abilities to teach effectively, and a strong belief system in creating and implementing literacy curriculum for all students.

LEARNING COMMUNITY

DISPOSITIONS:
Habits of Thinking
and Action
Regarding
Teaching and
Children AND Self-
Efficacy of
teachers

VISION:
Images of Good
Practice that
Guide Teaching

TOOLS:
Conceptual and
Practical
Resources for Use
in the Classroom

PRACTICES:
A Repertoire of
Instructional
Strategies

KNOWLEDGE:
Understanding of
Content,
Pedagogy,
Students, and
Social Contents

Figure 8. Learning Communities

Pearson (1999) in his review of the work of Snow, Burns, and Griffin (1998),
strongly advises educators to consider not only the "art" of teaching, but to evaluate

literacy programs and recognize that this profession of teaching is based on behavioral sciences.

Pearson (1999) states:

> We have a professional responsibility to forge best practices out of raw materials provided by our most current and most valid readings of research…This is the path that other professions, such as medicine, have taken in order to maintain their professional prerogative, and we must take it, too (p.245).

If we want to ensure teachers have choice in teaching that will best benefit their individual students, teachers must be able to demonstrate literacy instruction that is research-based.

Implications for Personnel Preparation

This study was conducted in response to several professors' articulation of the decreased level of knowledge of content and lack of application of literacy skills. Because of this and the observance of a lack of self-efficacy witnessed by the researcher in the current teacher education courses taught, a significant question came to mind. Are our 21st century university campuses ready to make changes to a new way of preparing pre-service teachers? As seen in the literature review, many young teachers are leaving the field shortly after the start of their careers. Research in this area has been scarce in regards to what is causing this mass exodus. Is it lack of preparation ? The wrong kinds of preparation? Lack of self-efficacy in the teaching of others?

Thorough analysis of the data of this study was completed, being fully aware of how I shaped the responses of the pre-service teachers in the Reflections Notebook intervention group. More than one source (open-ended survey and Likert scale survey) was used to allow for a deepening of understanding of the knowledge, belief systems, and levels of self-efficacy of the pre-service teachers. The responses from the

Reflections Interactive Notebook group were given in answer to the researched-based practices learned throughout the intervention period.

Many times, what pre-service teacher programs have to offer are limited to one of the three pathways of development: linguistic, cognitive, or physical. On a daily basis, the teachers of the 21st century are faced with challenging situations that call for not only teaching of the content area, but also social, moral, and physical pathways (Comer, 1996). As Myers (1996) stated, literacy is based on changes in jobs, personal growth, and citizenship. This must be taken into account as our society has changed drastically in these areas, leading to changes in social, moral, and emotional behaviors seen in children in our classrooms.

Teacher preparation programs need to give beginning teachers opportunities to grapple with the contradictions of old ways of teaching literacy that they experienced as children and reflect on and practice the new "literacies" of today. As stated in the theoretical framework section of the literature review, Vygotsky (1978) believed that social interaction determines the way people perceive and learn to "master" their environment. It was suggested that important people in the environment of these pre-service teachers could help guide these individuals in becoming lifelong researchers in education. Such tools as the Reflections Interactive Notebook allow for incorporation of the pre-service teachers' personal beliefs and knowledge, while providing for a period of reflection and discussion with their professors about learnings of these novice teachers.

Reflection is a social phenomenon that is interpreted by the pre-service teachers as they interact with the material they are learning, other students in the class, and their instructional leaders. It allows for them to define their belief systems and knowledge base as they learn about current researched-base practices.

To summarize, this type of practice in teacher education programs allows for the following:

1. Opportunities for reflection in both the university classrooms and in their assigned school environments.
2. Philosophical base by way of social constructivism.
3. Many opportunities for integrated learning, while practicing and reflecting on practices.

4. A number of approaches to teaching literacy (including scaffolding and differentiation of instruction) which allows for assessment of learners and the learning environment, effective researched-based instructional practices, and relevant practices of the diverse students of the 21st century.

Limitations and Further Studies

This was a study using two interventions, an innovative Reflections Interactive Notebook and a Reader's Response Journal, with pre-service teachers with respect to their self-efficacy, beliefs, and knowledge of literacy content. This type of research with pre-service teachers is vital to the future of education, and because of the results obtained from this study, replication with modifications to the study would be needed.

Because this study is a benchmark study, which was completed at one university, results would not necessarily generalize to teacher education programs at other universities. Differences in curriculum, different populations, and different instructors would need to be addressed.

In addition, the procedures method utilized in this study might have allowed for the "Hawthorne Effect." Students may have worked more efficiently when placed in the Reflections Interactive Notebook intervention group than the Reader's Response intervention group. Since one of the groups realized mid-stream that the researcher would be teaching the next semester's section of reading instruction, this is indeed a strong possibility. The drastic difference in the amount of researched-based responses from the Reflections Interactive Notebook could account for this effect.

Concerning validity, surveys parts 2, 3, and 4 were subject to threats of validity such as social desirability and response style bias. The open-ended portion of the survey worked to eliminate this threat. This study could be further strengthened by eliminating the Likert scale portion and including a mixed-methods manner of data collection. In further studies, it is recommended that open-ended surveys be piloted and then utilized for all three dependent variables (beliefs, self-efficacy, and knowledge). In addition, qualitative data would be beneficial, as interviewing participants in both intervention groups could yield reasons behind responses. It would allow for attainment of more detailed responses regarding the level of knowledge of

literacy content learned and the self-efficacy levels and belief systems of the pre-service teachers.

In terms of methodology, variability in instructors in both the Reader Response intervention group and Reflections Interactive Notebook intervention group should be considered. Use of fidelity checklists were utilized and evaluated to ensure the instructors were adhering to the protocol. Although fidelity checklists were utilized, differences in personalities could affect outcomes. Comparing professors' syllabi between the different sections of each group would provide a clearer picture of differences between the groups. It is also recommended the use of additional instructor training and videotaping be utilized to ensure consistency.

In addition, the study was limited by sample size and time. The number of possible participants is limited by a cap that is placed on students enrolled in the Teacher's Education program offered at Florida State University. It is recommended that further studies be conducted using larger sample sizes and possibly multiple universities.   In addition, although the researcher will share lessons from each area of literacy, but in a typical classroom setting, the amount of instruction would be 330 minutes versus 2,280 minutes (instruction for an entire semester). It is recommended research should include longer periods of time.

In conclusion, studies such as this one need to be viewed with importance by universities and colleges in the area of teacher education. Numerous benefits for prospective teachers and their students would be seen. Knowledge of what works in today's society, a belief system that ensues from research and reflection, practice of researched-based literacy instruction, and a true community of learners who share a passion for literacy.

Teaching is an art, but teaching is also very much a science. Many times teachers believe that some methods work better than others. What must be considered are the changing world and what aspects of literacy are proven to work in this complex world. There are valid ways to find which educational practices work best with pre-service teachers and the school-aged children in our nation. If pre-service teachers are taught from the start to be researchers of evidenced-based practices like those found in

the Reflections Interactive Notebook, then literacy instruction will become not only an art, but also a science.

APPENDIX A

FLORIDA STATE UNIVERSITY HUMAN SUBJECTS IN RESEARCH COMMITTEE
INSTITUIONAL REVIEW BOARD REVIEW FORM

Office of the Vice President For Research
Human Subjects Committee
Tallahassee, Florida 32306-2742
(850) 644-8673 · FAX (850) 644-4392

APPROVAL MEMORANDUM

Date: 9/23/2010

To: Susan James

Address: ███████████████████████████████████
Dept.: EDUCATION

From: Thomas L. Jacobson, Chair

Re: Use of Human Subjects in Research: The Art and Science of Teaching Literacy:
Empowering the Literacy Leaders of Tomorrow Through the Use of Interactive Reading
and Writing Notebooks

The application that you submitted to this office in regard to the use of human subjects
in the research proposal referenced above has been reviewed by the Human Subjects
Committee at its meeting on 09/08/2010. Your project was approved by the
Committee.

The Human Subjects Committee has not evaluated your proposal for scientific merit,
except to weigh the risk to the human participants and the aspects of the proposal
related to potential risk and benefit. This approval does not replace any departmental
or other approvals, which may be required.

If you submitted a proposed consent form with your application, the approved stamped
consent form is attached to this approval notice. Only the stamped version of the
consent form may be used in recruiting research subjects.

If the project has not been completed by 9/7/2011 you must request a renewal of
approval for continuation of the project. As a courtesy, a renewal notice will be sent to
you prior to your expiration date; however, it is your responsibility as the Principal
Investigator to timely request renewal of your approval from the Committee.

You are advised that any change in protocol for this project must be reviewed and
approved by the Committee prior to implementation of the proposed change in the
protocol. A protocol change/amendment form is required to be submitted for approval
by the Committee. In addition, federal regulations require that the Principal

Investigator promptly report, in writing any unanticipated problems or adverse events involving risks to research subjects or others.

By copy of this memorandum, the Chair of your department and/or your major professor is reminded that he/she is responsible for being informed concerning research projects involving human subjects in the department, and should review protocols as often as needed to insure that the project is being conducted in compliance with our institution and with DHHS regulations.

This institution has an Assurance on file with the Office for Human Research Protection. The Assurance Number is IRB00000446.

Cc: Mary Hanline, Advisor
HSC No. 2010.4682

STUDENT CONSENT LETTER

FLORIDA STATE UNIVERSITY

Department of Teacher Education

Dear Student,

My name is Susan Densmore-James, and I am a graduate student under the supervision of Dr. Mary Frances Hanline from the Teacher Education Department at Florida State University. You are invited to be in a research study about the effects of explicit reading and writing instruction through the use of Reflections Interactive Notebooks and what outcome this has on reading comprehension. In addition, it will allow for reflection of your own practices and will serve as an introduction to research-based instruction using a hands-on methodology.

Please read all of the following before agreeing to be a part of this study: If you choose to participate in the study, you will be asked to spend 30 minutes during your regularly scheduled class period to learn how to utilize these notebooks in your future classes.   During this time, half of your classmates will be receiving the same content through a different method.

By participating in this study, you will be helping contribute to all of the research completed on the best ways to teach students. All of your work will be kept confidential, and your name will never appear on any document you provide for research purposes. Your decision to participate is completely voluntary, and you may choose not to participate without penalty. If you do choose to participate, you may stop at any time during the experiment or skip any part of the instruction with which you do not feel comfortable.

I have read and understand this consent letter. I also understand it is completely my choice, and I can decide whether or not I would like to participate.

Student's Name _____

Date_____

 Student's Signature_____

FSU Human Subjects Committee Approved 9/27/10. Void after 9/07/11. HSC # 2010.5135

Critical Elements of Teacher Training	Sparks & Loucks-Horsley (1990) and Cruickshank and Metcalf (1990)	NCATE 2006	Strickland, Snow, Griffin, and Burns (2002)	IRA, 2003	RAND Study (2002)
• Sociological		X	X	X	X
• Linguistic Foundation			X	X	X
• Psychological		X	X	X	
• Reading Research			X	X	
• Language Development and Reading Acquisition		X	X	X	
• Cultural and Linguistic Diversity			X	X	
Areas of Reading			X		
• Phonics			X		
• Word Recognition			X		X
Fluency			X		X
Comprehension			X		X
• Explicit Instruction			X		
• Working hypotheses about poor comprehenders			X		X

Critical Elements of Teacher Training	Sparks & Loucks-Horsley (1990) and Cruickshank and Metcalf (1990)	NCATE 2006	Strickland, Snow, Griffin, and Burns (2002)	IRA, 2003	RAND Study (2002)
• Content area readings to foster comprehension			X		X
• Help students to build on background knowledge			X		X
Vocabulary			X		X
Motivation			X	X	
• Choice			X		X
• Collaborative Learning					X
Instructional Strategies				X	X
• Few rules a time	X				
• Grouping Options			X	X	
• Wide range of instructional strategies			X	X	X
• Technology			X	X	
• Start with basic understanding of a skill	X		X		
• discussion of skills	X		X		

Critical Elements of Teacher Training	Sparks & Loucks-Horsley (1990) and Cruickshank and Metcalf (1990)	NCATE 2006	Strickland, Snow, Griffin, and Burns (2002)	IRA, 2003	RAND Study (2002)
• Practice Time	X		X		
• Provide for feedback to students regarding mastery	X		X		
• Provide full support and reinforcement for the use of skills in natural settings	X		X		
Assessment, Diagnosis, and Evaluation			X	X	
• Wide range of tools			X	X	
• Reflection	X		X		
• Checking for understanding of skills/knowledge	X		X		
• Strengths and weaknesses	X		X	X	
• Communicate results to all relevant people			X	X	
Creating a Literate Environment			X	X	
• Students' interests for reading and writing			X	X	

Critical Elements of Teacher Training	Sparks & Loucks-Horsley (1990) and Cruickshank and Metcalf (1990)	NCATE 2006	Strickland, Snow, Griffin, and Burns (2002)	IRA, 2003	RAND Study (2002)
			X	X	X
• Wide variety of books, texts, etc.					
• Model reading and writing enthusiastically	X		X	X	
• Students informed of expectations of mastery	X		X		
Professional Development				X	
• Positive dispositions				X	
• Development of professional knowledge				X	
• Work with colleagues to observe, evaluate, and provide feedback				X	

Critical Elements of Teacher Training	Sparks & Loucks-Horsley (1990) and Cruickshank and Metcalf (1990)	NCATE 2006	Strickland, Snow, Griffin, and Burns (2002)	IRA , 2003	RAND Study (2002)
Physical Domain		X			
• Physical Functioning of students (provide for learning and classroom interactions)					
Cognitive Domain		X	X		
• Problem solving		X			
• Set Goals	X	X			
• Plan		X			
• Focus		X			
• Ethical					
• Respect for others/self		X			
• Integrity		X			

APPENDIX D
PRE AND POST SURVEY ON PRE-SERVICE TEACHERS' KNOWLEDGE, BELIEFS,
AND SELF-EFFICACY

Section 1: Language Arts Grid Activity (Cunningham, Zibulsky, Stanovich &Stanovich, 2009)

Instructions: Please indicate what kinds of activities you would engage in when teaching language arts (which would include your reading instruction). What portion of a two-hour-Language Arts instruction block would be spent on each activity? Or, if you are a secondary education student, what literacy activities would you use in your classroom?   On the left of the grid, list the Language Arts Activities, on the right, list the percentage of your Language Arts instructional time you would allocate to these activities. Please be as detailed and as specific as possible in the teaching activities that you generate. For example, do not just say "reading," but explain exactly the type/format of activities used during this time. Please make sure your averages add up to 100.

Activity	Percentage of Time Spent
	Total= 100%

<u>Section 2: Survey of Pre-service Teachers' Knowledge of Teaching and Technology</u>
<u>(Koehler, Mishra, and Shin, 2009)</u>

Using the scale, read each statement and select which score from the scale best describes you.

1-Strongly Disagree;   2-Disagree;   3 Agree;   4- Strongly Agree

1. I can use a literacy way of thinking.

2. I have various ways and strategies of developing my understanding of literacy.

3. I know how to assess student performance in a classroom.

4. I can adapt my teaching based upon what students currently understand or do not understand.

5. I can assess my student learning in multiple ways.

6. I can choose teaching tools and methods that will enhance the teaching approaches for a lesson.

7. I am thinking critically about how to use (literacy) reading and writing in my classroom.

8. I can use a wide range of teaching approaches in a classroom setting (collaborative learning, direct instruction, inquiry learning, problem based learning, etc.)

9. I am familiar with common student understandings and misconceptions.

10. I know how to organize and maintain classroom management.

11. I know how to select effective teaching approaches to guide student thinking and learning in reading and writing.

12. I can teach lessons that appropriately combine literacy and teaching approaches.

13. My literacy education professors appropriately model combining content and teaching approaches in their teaching.

Section 3: Self-Efficacy of Pre-service Teachers' Literacy Abilities (Gallavan, Boles, and Young (2007)

14. I can write correctly and clearly.

15. I can read well independently.

16. I can communicate effectively through various writing formats.

17. I can teach writing appropriately to my future students.

18. I can teach reading appropriately to my future students.

19. I can integrate writing authentically across the curriculum.

20. I can guide student writing supportively as essential for learning and living.

21. I can reflect personally and professionally through writing.

Section 4: Knowledge and Use of Reading Strategies (Akyol &Ulusoy, 2010)

22. I organize my reading environment.

23. I determine my aims for reading before starting to read.

24. I determine my reading method before starting to read.

25. I skim and scan the text I will read, and try to determine important details.

26. I think about the consistency between the context of the text and my reading aims.

27. I try to guess the context of the text by using headings and pictures.

28. I prepare right there questions by using the information in the text.

29. I make connections between my reading strategies and my background knowledge.

30. Even though I do not like reading the text, I try to understand it.

31. During the reading I think about what I should learn.

32. Even if the text is not interesting enough, I continue to read it.

33. I read the text without needing help from somebody else.

34. During the reading, I list important terms and try to memorize them.

35. During the reading, I determine the terms that I could not understand well enough.

36. I take notes during the reading.

37. Considering the type of the text, I adjust my reading speed.

38. During the reading, I determine important and unimportant ideas.

39. I can guess the meaning of unknown words or terms by using the contextual clues.

40. During the reading, I use dictionaries, spell check, etc.

41. When the text becomes too difficult, I read it with a closer attention.

42. During the reading, I try to guess the main idea of the text.

43. If I do not understand what I have read, I change my reading strategy.

44. During the reading, I stop from time to time to think about what I have just read.

45. I use the figures, tables, and graphics to help me understand the text.

46. During the reading, I make connections among the ideas.

47. I underline important parts of the text to help me remember them for later.

48. I use bold and italic characters to learn better what I read.

49. I imagine what I read.

50. I use my reading time efficiently.

51. I summarize the readings to increase my understanding of the important information in the text.

52. I prepare graphics, figures, and pictures to express what is read.

53. I check my accuracy of the guesses that I make about the text.

54. I ask myself questions to make sure I understand the text well.

55. I check other sources to see the suitability of the ideas presented in the text.

56. I criticize and evaluate the information presented in the text.

57. I investigate the convincingness of the text I read.

58. If I do not understand the text, I go back and reread.

59. I think about how I can use information I learned from the text.

Demographics:

60. Major

    a. Early Childhood Elementary

    b. Elementary Education

    c. Secondary Education

61. Degree Seeking

    a. Yes

    b. No

62. Area of Specialization

    a. Art

    b. Communications Disorder

    c. Early Childhood Education

    d. Elementary Education

    e. English and Language Arts

    f. Foreign Language

    g. Health

    h. History

    i. Mathematics

    j. Music

k. Science

l. Special education

m. Social Sciences

n. Special student

o. Speech

p. Theater

q. Other

63. Year in College

a. Freshman

b. Sophomore

c. Junior

d. Senior

e. Masters Program
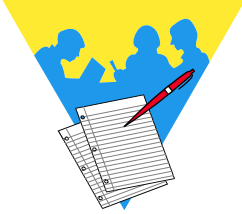
Interactive notebooks allow you to respond to reading in a different way. As you read, you will use several types of writing techniques to respond. This will help you use your critical thinking skills and reading strategies to process information. As a result, you will become a better reader and more creative, independent thinker.

Preparing to use your notebook

Here are the materials you will need for your interactive notebook:

- One 8 ½ x 11 spiral-bound notebook (100 pages or more)
- A pen
- A pencil with an eraser
- Two felt-tip pens of different colors
- Highlighters

These materials might also be useful, but are not a requirement:

- A variety of colored pencils
- A small pair of scissors
- A glue stick

Getting started

To begin your notebook, you will create a title page. Your title should include the following:

- Reflections Notebook
- Your name
- Your class period

I encourage you to use your creativity with this page, and add items such as borders, illustrations, and clip art.

Notebook Organization

Using your notebooks and the discussed reading strategies (see attached handout), you will respond in writing to what is read (in and out-of-class assignments). Whether you are given a passage on which to focus, or if you are reading independently, use of this notebook will help to reinforce reading strategies AND allow you to process the new ideas you are learning, create personal meaning from this information, and make personal connections. You will use this notebook for the following:

- Exploring your opinions
- Clarifying your values on issues that arise from readings
- Wondering "what if" in hypothetical situations
- Asking questions about new ideas
- Making connections to other texts, self, or world
- Making inferences
- Summarizing readings
- Visualizing different aspects of the texts (character, setting, etc.)

You will do this by:

- Drawing illustrations
- Using a variety of genres to respond to selected or assigned passages (poetry and prose)
- Including articles/writings which relate to classroom readings
- Highlighting passages in your writings and identifying reading strategies that are being used.

Student initiated extras:

- Elaborate drawings and illustrations
- References to films or books
- References to historical events
- Newspaper clippings and magazine articles
- Include poems/writings you find outside class.

APPENDIX E
REFLECTIONS NOTEBOOK CONTENT
ENTRY #1: GUIDING QUESTIONS

Three Key Questions and Supporting Strategies

Question 1
How does what I already know help me to comprehend?

- Predicting

- Making Inferences

- More on Inferring

Question 2
Do I understand what I am reading, and if not, what can I do about it?

- Questioning

- Monitoring, Questioning, and Re-predicting

- More on Monitoring

- Fixing your reading when you get stuck

- Making Connections (text-to-text, text-to-self, and text-to-world)**

- Imaging (pictures in your mind)**

Question 3

What does the author what me to know?

- Getting the main idea

- Purpose**

- Summarizing

(Heubach & Ivey, 2006; **Densmore-James, 2008)

APPENDIX E
REFLECTIONS NOTEBOOK CONTENT
ENTRY #2: WHAT IS READING?
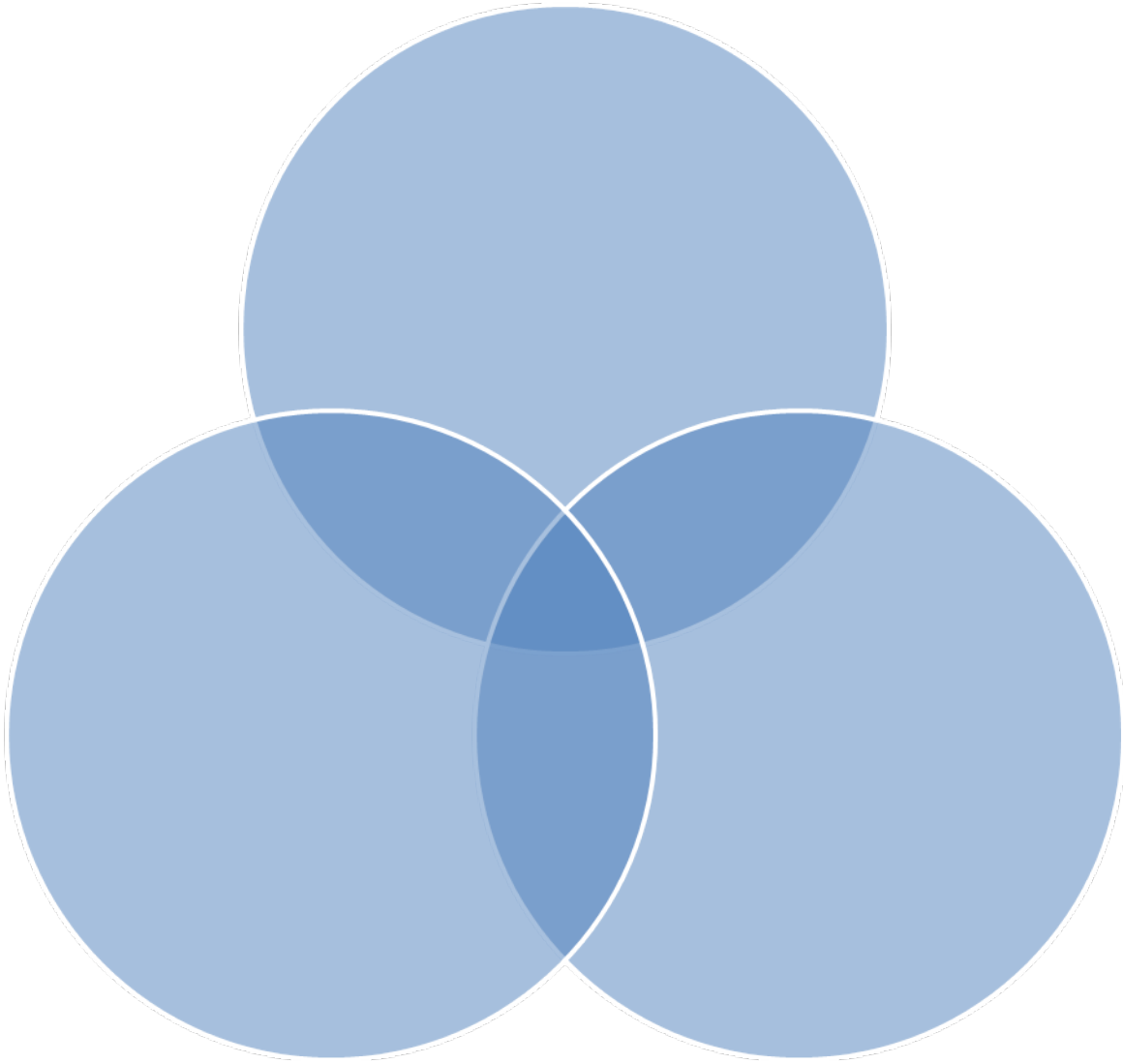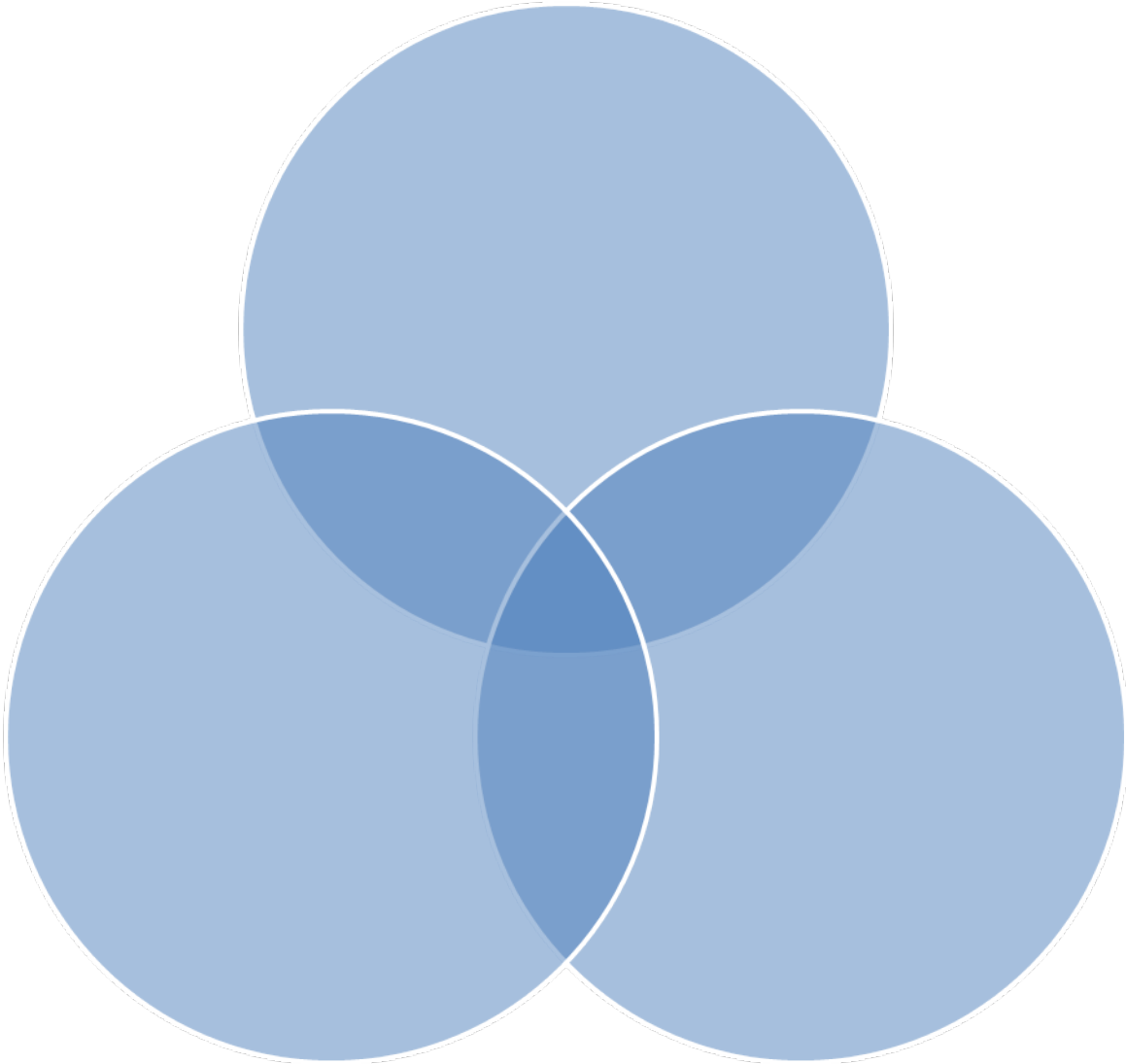
THE BIG PICTURE

So…What do we say to people who think you can separate reading and writing???

What is the connection between the six traits and reading?

(List created by participants of the Technology and Integration Workshop, October 10, 2007)

6 Trait	Reading
Ideas	Main Idea and Supporting Details
Organization	Text Structure (description, sequence, cause/effect, compare/contrast, and problem/solution)
Voice	Text types, persuasive reading, character development in narrative text
Word Choice	Figurative language, utilizing resources, visualization, and context clues
Sentence Fluency	Fluency, grammar
Conventions	Phonics, structural analysis, grammar

APPENDIX E
REFLECTIONS NOTEBOOK CONTENT
ENTRY #5: READING AND WRITING AUTOBIOGRAPHY

In order to better understand reading, consider your past reading history….

- Write a description of your own experiences as a reader.
- Write a description of your own experiences as a writer.
- What are your earliest memories of reading? Perhaps you will want to brainstorm using sensory images, clustering, or other pre-writing techniques to help you remember some of the people, events, and attitudes that shaped your growth as a reader and writer.
- What does reading enable you to do?
- Describe your school experiences with reading and writing?
- Do you remember particular books, or teaching methods (like phonics, flash cards, etc.)?
- What personal reading habits have you developed?
- Do you have favorite authors?
- What else do you read besides books?   Be specific.
- How do you come up with ideas for writing?
- What kind of reading do you do just for you?
- Have you ever encountered a book, which changed your life?
- What unpleasant experiences have you had with reading and/or writing?
- Define reading. How does that differ from literacy?

Elementary Reading Attitude Survey

School_____ Grade_____ Name_____

Please circle the picture that describes how you feel when you read a book.

1. How do you feel when you read a book on a rainy Saturday?

2. How do you feel when you read a book in school during free time?

3. How do you feel about reading for fun at home?

4. How do you feel about getting a book for a present?

Page 1

© PAWS – www.professorgarfield.org
Survey designed by Dennis J. Kear, Wichita State University

(McKenna & Kear, 2000)

Please circle the picture that describes how you feel when you read a book.

5.	How do you feel about spendng free time reading a book?
6.	How do you feel about starting a new book?
7.	How do you feel about reading during summer vacation?
8.	How do you feel about reading instead of playing?

Page 2

(McKenna & Kear, 2000)

Please circle the picture that describes how you feel when you read a book.

13. How do you feel about reading in school?

14. How do you feel about reading your school books?

15. How do you feel about learning from a book?

16. How do you feel when it's time for reading in class?

Page 4

(McKenna & Kear, 2000)

157

Please circle the picture that describes how you feel when you read a book.

17. How do you feel about stories you read in reading class?

18. How do you feel when you read out loud in class?

19. How do you feel about using a dictionary?

20. How do you feel about taking a reading test?

Page 5

(McKenna & Kear, 2000)

Map of Me

+5	
+4	
+3	
+2	
+1	
-1	
-2	
-3	
-4	
-5	

(Harvey & Goudvis, 2007)

APPENDIX E
REFLECTIONS NOTEBOOK CONTENT
ENTRY #7: TEXT GRAPHING EXAMPLE
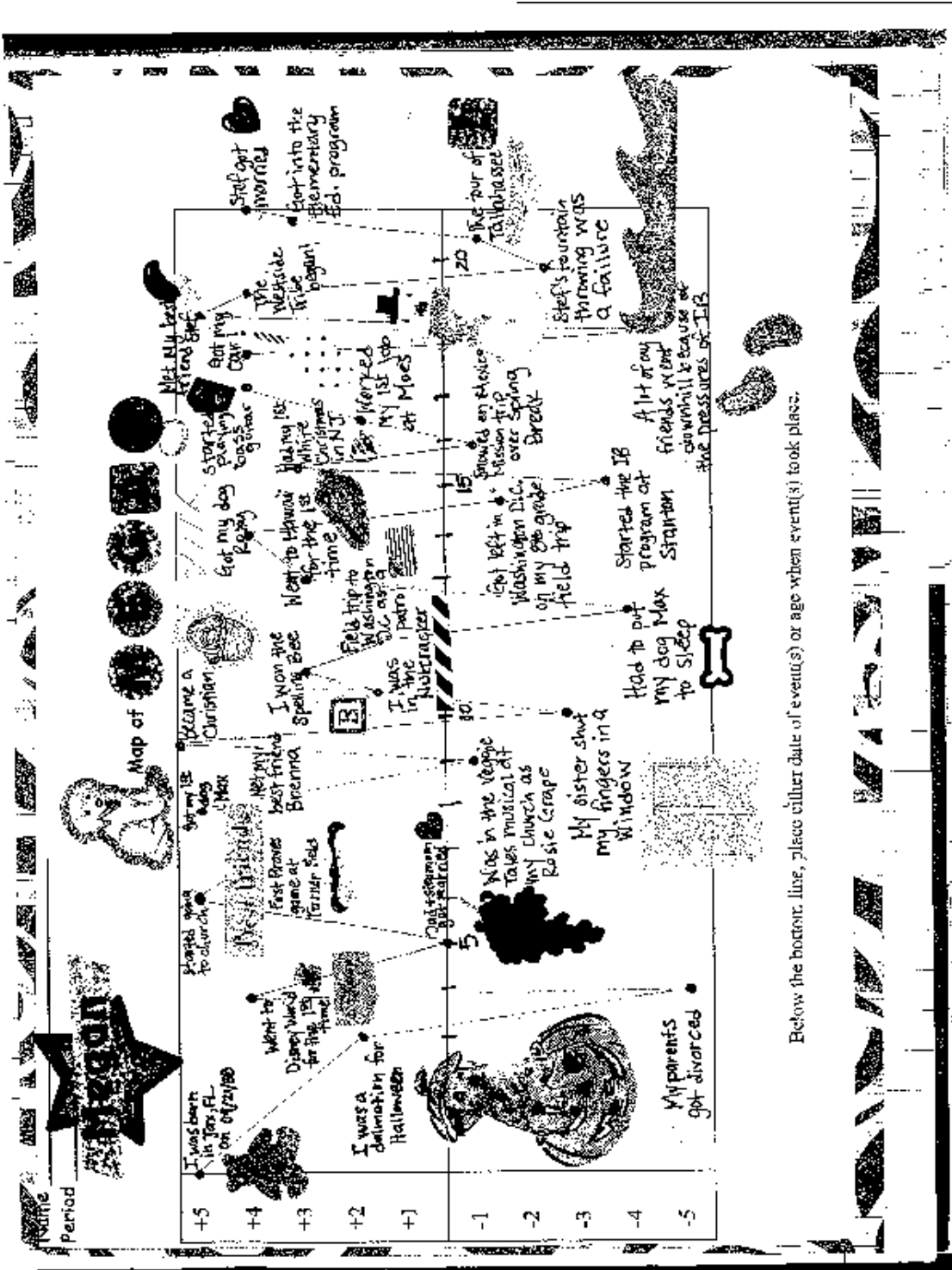
SORT 12   Alphabet Tracking Strip

Touch and name each letter.

60

Aa Bb Cc Dd Ee Ff Gg Hh

Ii Jj Kk Ll Mm Nn Oo Pp Qq

Rr Ss Tt Uu Vv Ww Xx Yy Zz
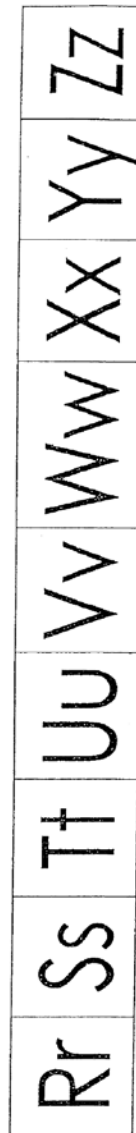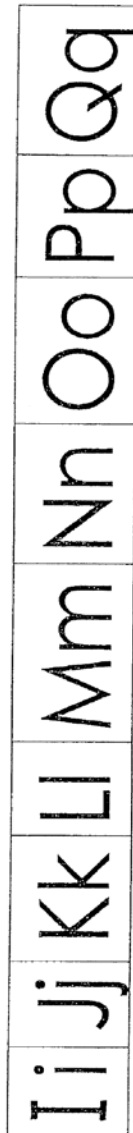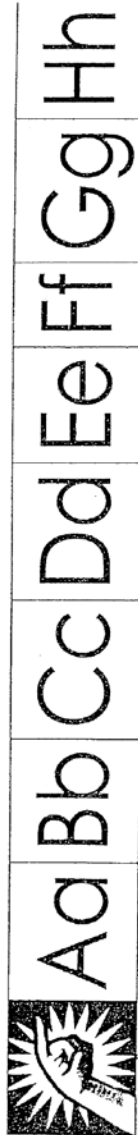
Words Their Way: Letter and Picture Sorts for Emergent Spellers © 2006 by Prentice-Hall, Inc.

(Bear & Invernizzi, 2006)

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REFLECTIONS NOTEBOOK CONTENT
ENTRY #9: PHONEMIC AWARENESS SEQUENCE

Phonemic Awareness—A Continuum of Difficulty

1. **Syllable awareness:** Hearing syllables

2. **Onset rime**: Do these words rhyme?

3. **Phoneme comparison:** Do these words start/end with the same sound?

4. **Phoneme isolation:** I will say a word. Tell me the first/middle/last sound you hear.

5. **Phoneme blending:** Blend sounds together

6. **Phoneme segmentation:** I will say a word. How many sounds did you hear? Count them.

7. **More complex manipulation**:
    a. Addition: say "pot", add /S/
    b. Deletion of initial or final phonemes: say "lamp" without the /l/
    c. Deletion of initial phoneme in a blend: say "drip" without the /d/
    d. Non-words

(Foorman & Moats, 2004)
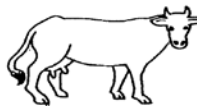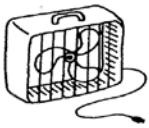
103

(Bear & Invernizzi, 2006)

SORT 3   Beginning Consonants

(Bear & Invernizzi, 2006)

APPENDIX E
ENTRY #12: REFLECTIONS NOTEBOOK CONTENT:
PHONICS SEQUENCE

Purpose: How do I begin with phonics?

Knowledge: General Sequence for Teaching Phonic Elements
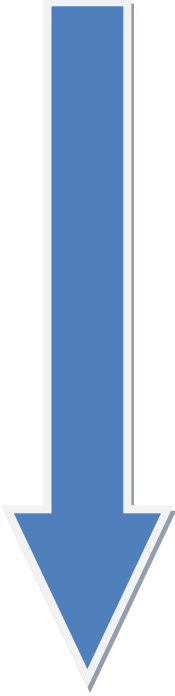
- Single consonants and short vowels
- Consonant digraphs
- Long vowels with silent e (CVCe pattern, ex: face)
- Long vowels at the end of words or syllables
- Y as a vowel
- R-controlled vowels
- Silent consonants
- Vowel digraphs
- Variant vowel digraphs and diphthongs

Use your CORE textbook to find ideas. What do you do if a student masters a vowel, but you have others who do not?

(Chall and Popp, 1996)

Word Cards for Selection 8: *Humpty Dumpty*

Humpty Dumpty sat on a wall.		
Humpty	Dumpty	sat
on	a	wall.

Humpty Dumpty had a great fall.		
Humpty	Dumpty	had
a	great	fall.

Words Their Way: Letter and Picture Sorts for Emergent Spellers © 2006 by Prentice-Hall, Inc.

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(Bear & Invernizzi, 2006)

Name_____   Date/Story Number_____
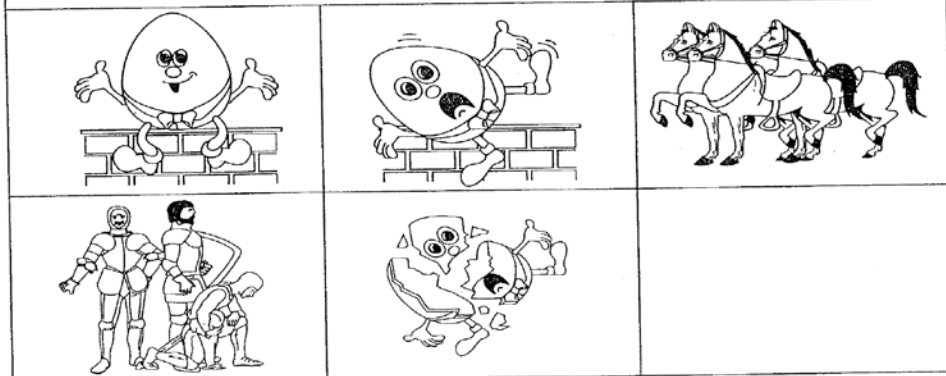
Humpty Dumpty

Humpty Dumpty sat on a wall.

Humpty Dumpty had a great fall.

All the king's horses

And all the king's men

Couldn't put Humpty together again!

Words Their Way: Letter and Picture Sorts for Emergent Spellers © 2006 by Prentice-Hall, Inc.

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(Bear & Invernizzi, 2006)

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The Sounds of English

Consonant Sounds					
1. /b/	bat	10. /n/	nest	18. /z/	zebra
2. /d/	dog	11. /p/	pig	19. /ch/	cheese
3. /f/	fish	12. /r/	rock	20. /sh/	shark
4. /g/	gate	13. /s/	sun	21. /zh/	treasure
5. /h/	hat	14. /t/	top	22. /th/	thumb
6. /j/	jump	15. /v/	vase	23. /th̶/	the
7. /k/	cat	16. /w/	wagon	24. /hw/	wheel
8. /l/	leaf	17. /y/	yo-yo	25. /ng/	ring
9. /m/	mop				

Vowel Sounds				
1. /ā/	cake		11. /ə/	alarm
2. /ē/	feet		12. /â/	chair
3. /ī/	bike		13. /er/	bird
4. /ō/	boat		14. /ä/	car
5. /ū/	cube		15. /aw/	ball
6. /ă/	cat		16. /oi/	boy
7. /ĕ/	bed		17. /ow/	house
8. /ĭ/	fish		18. /o͞o/	moon
9. /ŏ/	lock		19. /oo/	book
10. /ŭ/	duck			

Adapted from Blevins, W. Phonics from A to Z. New York: Scholastic Professional Books, 1998.

English Sounds Not Used in the Language											
Spanish	dg	j	sh	th	z						
Chinese	b	ch	d	dg	g	ō	sh	s̲	th	th̶	v	z
French	ch	ē	j	ng	oo	th	th̶					
Greek	aw	ē	ī	oo	ə							
Italian	a	ar	dg	h	i	ng	th	th̶	ə			
Japanese	dg	f	ī	th	th̶	oo	v	ə				
Portuguese	dg	k	ī	th	sh	oo	aw					

Adapted from Fry, E. et al. The Reading Teacher's Book of Lists, 4th Edition. New Jersey: Prentice Hall, 2000.

(The Reading Teacher's Book of List, 2000)
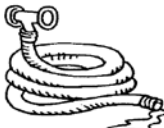
Various Spellings for Vowel Sounds

/ō/		/ā/		/ī/		/ē/		/ū/		/oo/	
oCe	note	aCe	ape	iCe	kite	ee	meet	uCe	mule	oo	boot
oa	boat	ai	rain	ie	tie	ea	seat	u	pupil	ue	blue
oe	toe	ay	say	i	wild	ie	chief	ew	few	ew	new
o	most	ea	steak	igh	night	y	funny	ue	continue	u	super
ow	grow	ey	they	y	fly	e	she	eu	feud	ui	suit
ough	though	eigh	eight	eigh	height	iCe	petite	hu	huge	uCe	flute
ou	soul	a	paper	ais	aisle	i	variation	eau	beauty	ou	soup
oo	brooch	ei	vein	ei	stein	ei	receive	you	you	oe	shoe
ew	sew	aigh	straight	ye	dye	eCe	eve	ut	debut	o	do
eau	beau	et	ballet	uy	guy	ey	key	iew	view	wo	two
owe	owe	hei	heir	ia	diamond					ough	through
au	mauve	aig	champaign								
		au	gauge								
/ĕ/		/ĭ/		/er/		/ŭ/		/aw/		/ə/	
e	bed	i	in	er	faster	u	tub	aw	lawn	a	about
ea	bread	y	myth	ur	turn	ou	touch	au	fraud	e	happen
ai	said	e	pretty	ir	girl	oCe	some	a	tall	i	direct
ie	friend	ie	sieve	or	work	a	about	ough	fought	o	lesson
ue	guess	ui	build	ear	learn	o	son	augh	taught	u	circus
a	any			yr	myrtle	oe	does	oa	broad		
ay	says			ar	dollar	oo	blood	o	toss		
								ou	cough		
/ow/		/oi/		/oo/		/ă/		C = consonant			
ow	cow	oi	soil	oo	cook	a	cat				
ou	out	oy	toy	oul	would	ai	plaid				
ough	drought			u	put						

Various Spellings of Consonant and Consonant Diagraph Sounds

/t/		/k/		/l/		/s/		/z/		/sh/	
t	tab	k	kite	l	lip	s	sip	z	zip	sh	fish
tt	mitt	c	cat	ll	full	ss	glass	zz	buzz	s	sure
bt	debt	ck	duck	le	sample	c	cent	s	is	ti	nation
pt	receipt	ch	chorus	el	label	ce	voice	ss	scissors	ch	machine
th	thyme	lk	yolk	tle	castle	ps	psychology	x	xylophone	ci	special
cht	yacht	que	opaque	sl	island	st	listen	cz	czar	se	nauseous
ct	indict	cc	account	cl	muscle	z	waltz	si	business	si	mansion
ed	talked	cqu	lacquer	ln	kiln	sc	science	sp	raspberry	ss	tissue
ght	bought	qu	liquor					sth	asthma	t	negotiate
		sc	viscount					thes	clothes	chs	fuchsia
		kh	khaki					se	choose		
								ze	snooze		
/ng/				/b/		/w/				/h/	
ng	ring			b	big	w	wagon			h	hot
n	pink			bb	rubber	o	once			wh	whole
ngue	tongue			pb	cupboard	ou	bivouac				
/g/		/p/		/v/		/d/		/r/		/y/	
g	gate	p	hop	v	very	d	dog	r	rat	y	yes
gg	egg	pp	happy	ve	nerve	dd	ladder	wr	write	I	onion
gh	ghost	ph	diphtheria	f	of	ed	called	rh	myrrh	e	azalea
gue	plague			lve	halve	ld	should	rps	corps	ll	tortilla
gu	guilt							rt	mortgage		
								rh	rhino		
/zh/		/j/		/ch/		/n/		/f/		/m/	
si	vision	j	jet	ch	cheese	n	no	f	fat	m	man
s	pleasure	g	gentle	t	nature	nn	inner	ff	stuff	mm	simmer
g	rouge	ge	barge	tch	match	kn	know	ph	phone	mb	climb
z	azure	dge	fudge	c	cello	gn	gnat	gh	tough	mn	autumn
ti	equation	d	graduation	che	niche	pn	pneumonia	lf	calf	lm	calm
ssi	scission	dj	adjust	te	righteous	mn	mnemonic	ft	often	gm	paradigm
		de	grandeur	tu	nature	nd	handsome	pph	sapphire		

Adapted from Blevins, W. Phonics from A to Z. New York: Scholastic Professional Books, 1998.

(The Reading Teacher's Book of List, 2000)

SORT 3   Beginning Consonants

Cc	Hh	Ff	Dd

(Bear & Invernizzi, 2006)

Kindergarten

Concept	Explanation & Example
Directionality	Left to right
Visual Matching	Words, phrases, sentences, letters
Locating Letters	In list, in words
Alphabet Knowledge	Upper & lower case
Phonemic Awareness	Hear words in sentence, syllables in words, matches like sounds in words, recognizes rhyming words
Phonics	Alphabetic principle Knowledge of initial consonant sounds *(Examples: m, t, s, f, d, r, g [hard], l, h, c [hard], b, n, k, v, w, j, p, y, z)* Short vowels *(Examples: a, e, o, i, u)*
Small Sight Vocabulary	Recognizes own name High frequency words Environmental print
Onset Rime With Some Short Vowels	c-at h-am h-op l-ot s-it

Grade 1

Concept	Explanation & Example
Onset - Rime Analogies	Uses patterns in known words to identify unfamiliar words *(Example: bat to batter)*
Phonemic Awareness	Matches similar medial sounds in short words *(Examples: bed, men, pet, red)*
	Segments and blends phonemes in short words *(Example: /s/i/p/=sip)*
Phonics	Consonant Sounds *(Examples: m, t, s, f, d, r, g (hard), l, h, c (hard), b, n, k, v, w, j, p, y, z, qu, x)*
	Short vowel sounds *(Examples: a, e, o, i, u [single syllable phonics])*
	endngs *(Examples: s, ed)*

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Consonant digraphs *(Examples: ch, sh, th, wh)*

Ending consonant digraphs *(Examples: -ng, -ck, -nk, -ch)*

Blending & segmentation *(Examples: CVC, CVCC, CCVC, CCVCC)*

Long vowel pattern [VCfinalE] *(Examples: a=made; i=hide; o=robe; u=cute; e=Pete)*

Beginning consonant blends *(Examples: bl, cl, fl, gl, sl,* and *cr, pr, br, fr, gr,* and *dr, tr, st, sc, sk, sp, sm, sn, sw, tw)*

Long vowel pattern (CVVC) *(Examples: a=maid; o=boat; e=meat)*

Word Sort Directions

Step 1
Begin by placing the three or four key word cards at the top of the columns. Make sure that the children in the group can easily read the headings (key words).

Step 2
Take a card from the remaining cards, and place it below the key word card with the same ending (if a word family sort) or same vowel sound (if a short vowel or pattern sort). To help children hear and connect the sounds and words, carefully model the process by emphasizing the sound and saying each key word with the new word. For example, if the key words are *sat*, *man* and *cap* and the first word to sort is *can*, then you would hold the word can next to each of the key words and say, "can – sat, can – man, can – cap." "*Can* goes with *man* so I will place it in that column."

Step 3
Guide children to place the remaining word cards. Give the children support as they begin to sort. Every time a card is sorted, lead the group to say all of the words in the column thus reinforcing the pattern. For example, in the following sort, after the word *pat* is placed in the first column, have the children read down the column: *cat, rat, sat, pat*.

A Families: at-an-ap

cat	ran	map
rat	fan	tap
sat	pan	sap
pat	man	clap
flat	plan	snap

Step 4
Have the children sort and practice independently or with a partner, using their own word cards. After they practice the sort, they can play concentration (memory) with the cards from the sort.

Heubach
2006

map	ran	cat
tap	fan	rat
sap	pan	sat
clap	man	pat
snap	plan	flat

REFLECTIONS NOTEBOOK CONTENT
ENTRY #19: WORD SORTING: SEQUENCE

EXAMPLE SET:

Week 1:Short Vowels a,i,o			Week 2: Short Vowels l,o,u			Week 3: Short Vowels o,u,e		
cat	pig	hot	hit	top	bug	mom	fun	red
had	win	fox	this	chop	cup	hop	bus	pet
back	with	rock	ship	drop	but	doll	nut	web
Clap	Ship	job	slick	mom	luck	rock	jump	then
Glad	Swim	stop	win	clock	must	stop	truck	nest

A complete list of Level 1 and 2 Word Sorts are given to students. This is a sample of the first three weeks of study.

APPENDIX E
REFLECTIONS NOTEBOOK CONTENT
ENTRY #20: NOTES FOR PRE-SERVICE TEACHERS:
WORD SORTING (OLDER STUDENTS)

benefit	bibliography	append	verdict	graphology
progress	deception	impend	telegraph	benefactor
geography	dictionary	benediction	digress	pendulum
precept	pendant	transgress	contradict	biography
predict	inception	depend	susceptible	bibliophile

(Bear , Invernizzi, Templeton, & Johnston, 2004)

Push & Say It

1. Push up letter tile "b" with your finger and say the sound /b/.

b at
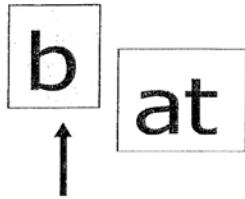
2. Push up letter tile "at" with your finger and say the sounds /at/.

b at
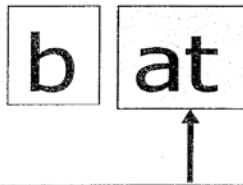
3. Blend the sounds together and read the word.

b at
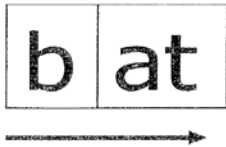
Note: Push & Say It is illustrated above with an onset-rime unit but this strategy can also be used with individual phonemes. Depending on the phonological skill, more than two letter tiles may be used.

(adapted from the Virginia Department of Education, 2000)

Source: Rasinski, Timothy V. (2003). *The Fluent Reader*. New York: Scholastic Professional Books.

Repeated Reading Practice First 100 Words

These phrases contain the first 100 words from the Fry Instant Word List (1980), which represent 50 percent of all the words children encounter in elementary school reading. Repeated reading of a few phrases per week gives students practice reading high-frequency words and developing fluency and general proficiency. These phrases may be written on sentence strips, transparencies, or on a chart for use in literacy center or small group instructional setting.

The people	Look for some people.	Write it down.
By the water	So there you are.	Who will make it?
You and I	A long time	What will they do?
He called me.	Have you seen it?	We had their dog.
What did they say?	One more time	When would you go?
No way	All day long	A number of people
One or two	It's about time.	How long are they?
More than the other	Up in the air	Come and get it.
How many words?	Which way?	Part of the time
This is a good day.	He has it.	Can you see?
Sit down.	If we were older	Now and then
But not me	It's no use.	Go find her.
Not now	With his mom	At your house
From my room	As big as the first	It's been a long time.
Will you be good?	When will we go?	Give them to me.
Then we will go.	From here to there	Now is the time.
An angry cat	More people	May I go first?
Write your name.	Go down.	This is my cat.
That dog is big.	Did you like it?	Get on the bus.
Two of us	When did they go?	Did you see it?
The first word	She said to go.	How did they get it?
I like him.	Each of us	Number two
Out of the water	What are these?	Look up.
We were here.	There was an old man.	All or some
Could you go?	It may fall down.	A long way to go
We like to write.	See the water	For some of your people
Into the water	**But not for me**	**The other people**

APPENDIX E
REFLECTIONS NOTEBOOK CONTENT
ENTRY #23 FLUENCY: SIGHT WORDS

Preprimer	Primer	First	Second	Third
a	all	after	always	about
and	am	again	around	better
away	are	an	because	bring
big	at	any	been	carry
blue	ate	as	before	clean
can	be	ask	best	cut
come	black	by	both	done
down	brown	could	buy	draw
find	but	every	call	drink
for	came	fly	cold	eight
funny	did	from	does	fall
go	do	give	don't	far
help	eat	going	fast	full
hers	four	had	first	got
I	get	has	five	grow
in	good	her	found	hold
is	has	him	gave	hot
it	he	how	goes	hurt
jump	into	just	green	if
little	like	know	its	keep
look	must	let	made	kind
make	new	live	many	laugh
me	no	may	off	light
my	now	of	or	long
not	on	old	pull	much
one	our	once	read	myself
play	out	open	right	never
red	please	over	sing	only
run	pretty	put	sit	own
said	ran	round	sleep	pick
see	ride	some	tell	seven
the	saw	stop	their	shall
three	say	take	these	show
to	she	thank	those	six
two	so	them	upon	small
up	soon	then	us	start
we	that	think	use	ten

yellow	there	walk	very	today
you	they	where	wash	together
	this	when	which	try
	too		why	warm
	under		wish	
	want		work	
	was		would	
	well		write	
	went		your	
	what			
	white			
	who			
	will			
	with			
	yes			

Gemini Elementary School (www.geminischool.org)

Dolch Word List

Making Predictions:

PRE- Means "before"   DICT- Means "Say or Speak"   TION- Means "Act of"

- THINK ALOUD!!!! This will help you.
- Look for clues while you are reading about what will likely happen next.
- By looking at the   cover. " I am gues sing or pr edicting the s tory w ill be   about _____.   When we use what we know to make a guess before we read it is called 'predicting.'
- Think aloud w hile r eading a book … "Hmmm… my pr ediction that the s tory w ould b e about ____ was right, but I did not think that ____ would happen. I'll make a new prediction that _____ will happen based on what we read."
- "My first prediction was _____. After reading part of the story I predicted _____. Now that I am fi nished reading I think my predictions were c lose/not c lose to what r eally happened because_____."
- Stop at poi nts throughout the book ….Make pr edictions at t hese poi nts. Y ou c an e ven use "sticky notes" or draw pictures in your journals to help write predictions . \
- Revise (change) any incorrect predictions or verify their predictions. Make changes to the journals or chart as needed.
- At the end of the s tory, think about predictions in r elation to the entire story and dr aw a final s ketch or w rite a journal r esponse about y our predictions. Think about w hy your prediction was c orrect or i ncorrect and w hat i nformation you us ed to m ake that decision.

Prediction	Clues	Was prediction correct? Why?

Adapted from *Strategies that Work* (Harvey & Goudvis, 2007*)*

Making Text-to-Self Connections

The author said:	That reminds me of…

Adapted from *Strategies that Work* (Harvey & Goudvis, 2007*)*

Making Text-to-Text Connections

In this text…	That is like…

Adapted from *Strategies that Work* (Harvey & Goudvis, 2007*)*

Making Text-to-World Connections

The author says…	This reminds me of…

Adapted from *Strategies that Work* (Harvey & Goudvis, 2007*)*

Making an Inference		
What Happened?	**What Does It Mean?**	**Why Do You Think That?**

Drawing a Conclusion		
Information	Information	Information
My Conclusion:		

When explaining "Why you think that," you should provide specific details, examples, and quotations to support your claims. You should also be able to explain why something matters.

(Burke, 2000)

Question Matrix

	Event I. Knowledge	Situation	Choice	Person	Reason II. Comprehension Application	Means
Present	1. What Is?	2. Where/When Is?	3. Which Is?	4. Who Is?	5. Why Is?	6. How Is?
Past	7. What Did?	8. Where/When Did?	9. Which Did?	10. Who Did?	11. Why Did?	12. How Did?
Possibility	13. What Can?	14. Where/When Can?	15. Which Can?	16. Who Can?	17. Why Can?	18. How Can?
Probability	19. What Would?	20. Where/When Would?	21. Which Would?	22. Who Would?	23. Why Would?	24. How Would?
Predictability	25. What Will?	26. Where/When Will?	27. Which Will?	28. Who Will?	29. Why Will?	30. How Will?
Imagination	31. What Might?	32. Where/When Might?	33. Which Might?	34. Who Might?	35. Why Might?	36. How Might?

III. Synthesis & Analysis   **IV. Synthesis & Analysis**

From Dr. Chuck Wiederhold's book <u>Cooperative Learning & Higher Level Thinking</u>, available from Kagan Cooperative Learning 27134 Espada, Suite 303, San Juan Capistrano, CA -1-800-933-2667.

Arth, M. A. Teacher questioning in the elementary mathematics classroom: Engaging students in an on-task dialogue. University of Wyoming. Retrieved from Dissertation Abstracts.

APPENDIX E
REFLECTIONS NOTEBOOK CONTENT
ENTRY # 30: DENSE QUESTIONING
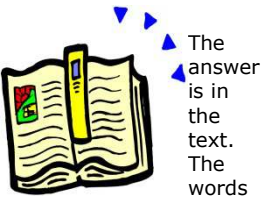
Dense Questioning

Practice using the novel you are reading! Use the sample from *The Watsons Go to Birmingham* to help you.

Type of Question	Description	Questions Generated
Text	Information found in the text	
Reader	Reader's experience, values, and ideas	
World or Other Literature	Knowledge of history, other cultures, other literature	
Text/Reader	Combines knowledge of text with knowledge of history and other cultures	
Text/Other Literature	Combines knowledge of text with knowledge of other pieces of literature	
Reader/World	Combines knowledge of reader's own experiences with knowledge of other culture and people	
Reader/Other Literature	Combines knowledge of reader's own experiences with other pieces of literature	
Dense Question	Combines knowledge of all three areas into one "dense" question	

Adapted from www.greece.k12.ny.us/.../ELA/6-12/Reading/Reading%20Strategies/**d**ense%

In-the-Book Questions	In-My-Head Questions
Right There Questions The answer is in the text. The words used to make up the question and words used to answer the question are found in the same sentence.	**Author and You Questions** The answer is not in the story. You need to think about what you already know, what the author tells you, and how it fits together.
Think and Search The answer is in the selection, but you need to put together different pieces of information to find it. The answer comes from different places in the selection.	**On My Own** The answer is not in the text. You can answer the question without even reading the text. The answer is based solely on your own experiences and knowledge.

(Information for chart from Santa, Havens, Valdes (2004)

APPENDIX E
REFLECTIONS NOTEBOOK CONTENT
ENTRY # 32: SUMMARIZING

Somebody	Wanted	But	So

(Beers, 2003)

APPENDIX E
REFLECTIONS NOTEBOOK CONTENT
ENTRY # 33: SUMMARIZATION

The GIST Procedure (Generating Interactions Between Schemata and Text)

The GIST Procedure is a strategy that can be used to improve students' abilities to comprehend the gist or main ideas of paragraphs by providing a prescription for reading from group sentence-to-sentence production to individual or partner entire paragraph gist production. It incorporates both reading and writing, important for the adult student. You can either use a paragraph or short passage version.

Paragraph Version
1. Choose the appropriate paragraphs. Choose several paragraphs containing three to five sentences each of which has a gist or main idea.
2. Students read the first sentence. Have the students read the first sentence of the paragraph so that they can retell it in their own words. The sentence can be written on the board with blank lines underneath it. The students then write their summaries on the blank lines.
3. Students generate their summaries. The students retell in a statement of 15 or fewer words what they read in the sentences.
4. Reading the first two sentences. The students read the first and second sentences and retell them in the same number of words used for the first sentence alone.
5. Generate a summary of sentences one and two. The students then generate a single sentence of no more than 15 words that summarizes both sentences one and two.

Another Option:

1. If using text that deals with a certain topic, have students generate a list of words that relate to that topic.
2. Read the text.
3. As a class, eliminate 10 of the words.
4. As a class, keep eliminating until there are only 5 words left.
5. Next, have the students use those 5 words to write a one sentence summary

Children's Book Suggestion: *Agatha's Feather Bed*

Adapted from: Allington & Cunningham, 2003

The Story Pyramid

Use a story pyramid to describe important information from a story, such as the main character, the setting, and the major events in the plot. Carefully choose your words in order to provide a precise description. You may wish to use a dictionary and a thesaurus. Suggested title to use Bubba, *The Cowboy Prince.*

Here are the directions for writing a story pyramid:

Capitalize the first word in each line.
Line 1-- one word, stating the name of the main character.
Line 2—two words, describing the main character
Line 3 – three words, describing the setting
Line 4 – four words, stating the problem
Line 5 – five words, describing one event
Line 6 – six words, describing a second event
Line 7 – seven words, describing a third event
Line 8 – eight words, stating the climax of the story
Line 9 – nine words, stating the falling action of the story
Line 10 – ten words, stating the conclusion or solution to the problem

Cinderella
Poor, beautiful
Town with castle
Forbidden to attend ball
Fairy godmother helps her go
Cinderella loses her slipper at midnight
Prince searches entire town for perfect fit
Unique glass slipper fits only Cinderella's slender foot
Stepsisters beg for forgiveness from the newly favored Cinderella
Cinderella marries Prince Charming, lives in castle happily ever after

(Family Education Network, Pearson Education, 2000-2010)

Visualizing

See	
Hear	**Taste**
Smell	**Feel**

Adapted from *Strategies that Work* (Harvey & Goudvis, 2007*)*

Wordstorming from A-Z

A-B	C-D	E-F	G-H
I-J	K-	M-N	O-P
Q-R	S-T	U-V	WXYZ

(Janet Allen,
www2.visalia.k12.ca.us/techcoach/Docs/HSS%20Docs%20Bastrire/**wordstorming**.doc ·)
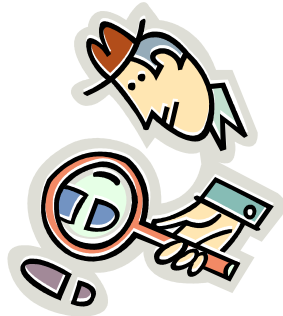
CLUING VOCABULARY

Get a "clue" about vocabulary…..

1. Melba Pattillo Beals experienced discrimination when she entered Central High School as one of the first African Americans to integrate America's all-white schools. (USING TARGET WORD APPROPRIATELY)

2. Discrimination is the unfair treatment, such as exclusion, name calling, and violent crime of individuals based on prejudice. (DESCRIBES CHARACTERISTICS)

3. Discrimination is when others don't let you in their group because of differences. (IN OWN WORDS)

4. Why does discrimination still exist today? (QUESTION)

(Adapted from Cunningham and Allington, 2003)

Vocabulary 4-Square

Vocabulary Word	Personal association
Meaning	Picture

(Cunningham and Allington, 2003)

Vietnam War
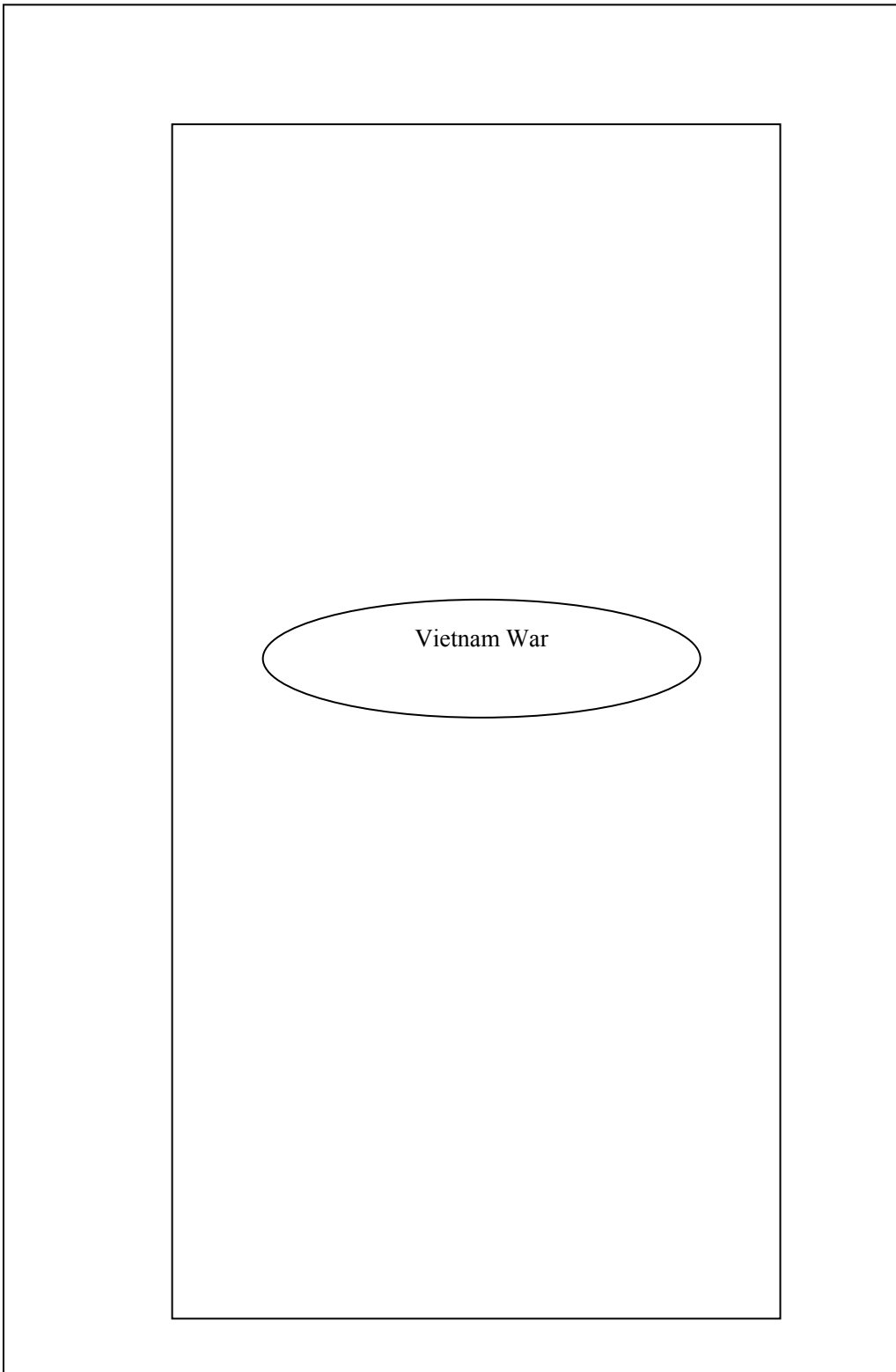
Frame Of Reference

Research to double check origins

Newspapers and Media at the time

Many guys from my high school got drafted or avoided the draft

- American involvement (1965 to 1973) but the origins of the war go back further (1940's)
- 1946 – at Geneva Conference, Vietnam temporarily divided into North Vietnam (Communists) and South Vietnam (Nationalists)
- Vietcong – a guerilla army that was backed by North Vietnam (and Chinese)
- America got involved, but it was an unpopular war and divided our country more and more as time passed; a major peace movement was born (began in colleges & universities)

Vietnam War

- The American soldiers were on the average very young (18-25); a military draft based on a lottery was used; the war tactics were horrific on both sides: Agent Orange, massacres, suicide bombers, etc.
- Approximately 58,000 American soldiers died before the conflict was over; The Vietnam Memorial was finally built to honor these soldiers
- We are still dealing with the psychological and social effects of this war; our surviving soldiers as well as the national guilt over the deep divisions this war engendered

I was a college student at the time
Participated in the peace movement

(Adapted from:
http://www.jackson.k12.ky.us/readingstrategies/more/socialstudies/glossary.htm)

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Struggles and Perseverance

Think about the books you are reading and consider the following questions:

- How does conflict lead to change in people?

- What problem-solving strategies can individuals use to manage conflict and change?

- How does an individual's point of view affect the way they deal with conflict?

- What personal qualities have helped you to deal with conflict and change?

- How might if feel to live through a conflict that disrupts your way of life?

- How does conflict influence an individual's decisions and actions?

- How are people transformed through their relationships with others?

- What is community and what are the individual's responsibility to the community as well as the community's responsibility to the individual?

- What is the relationship between decisions and consequences?

- How do we know how to make good decisions?

- How can a person's decisions and actions change his/her life?

- How do the decisions and actions of characters in the books you are reading reveal their personalities?

- How do decisions, actions, and consequences vary depending on the different perspectives of the people involved?

Adapted from www.greece.k12.ny.us/.../ELA/6-
12/Reading/Reading%20Strategies/dense%

The "I Am" Poem

This is a poem that can be used to describe any character, setting, idea or concept fond in literature from language arts, social studies, science, math, and art. The possibilities where you can use it with your class are endless.

The I Am Poem

I am	(Two special characteristics the person or thing has)
I wonder	(something the person or thing could actually be curious about)
I hear	(an imaginary or actual sound)
I see	(an imaginary or actual sight)
I want	(a desire)
I am	(the first line of the poem is repeated)
I pretend	(something the person or thing could actually pretend to do)
I feel	(a feeling about the imaginary)
I touch	(an imaginary touch)
I worry	(something that could really bother the person or thing)
I cry	(something that could make the person or thing sad)
I am	(the first line of the poem is repeated)
I understand	(something the person or thing knows to be true)
I say	(something the person or thing believes in)
I dream	(something the person or thing could actually dream about)
I try	(something the person or thing could make an effort to do)
I hope	(something the person or thing could hope for)
I am	(the first line of the poem repeated)

Adapted from:http://www.readwritethink.org/files/resources/lesson_images/lesson391/I-am-poem.pdf

APPENDIX E
REFLECTIONS NOTEBOOK CONTENT
ENTRY # 42: HAIKU

Objectives

- Write a haiku poem (ideas: Six Traits of Writing)
- Understand syllabication
- Use descriptive words to write poetry (word choice: Six Traits of Writing)
- Use of good literature to prompt the writing (ex: *The Kapok Tree*)
- Collaborative efforts (have students work in groups first)

Haiku poems are generally written to describe nature. The most widely recognized form consists of a three-line stanza that has a total of 17 syllables, written in the following pattern:

Line 1: 5 syllables

Line 2: 7 syllables

Line 3: 5 syllables

Clouds float slowly by
Fluffy, lumpy, cotton balls
Silver, gray, and white

Clouds float slow/ly by
Fluf/fy, lump/y, cot/ton balls
Sil/ver, gray, and white

The words and phrases used in haiku do not rhyme.

APPENDIX F
REFLECTIONS INTERACTIVE NOTEBOOK RUBRIC

	Outstanding! A/4	Amazing! B/3	So-So C/2	Oops D/1
Format of Notebook	• Right side-explicit literacy notes included • Left side-Original response using explicit instruction included • Reflection on practice included	• Most of the Notebook Format is included	• Some of the Notebook Format is included	• Little of the Notebook Format is included
Quality of Writing	• You address all important aspects of the explicit instruction topic • You demonstrate in depth understanding of the instruction	• You address most important aspects of the explicit instruction topic • You demonstrate understanding of the instruction	• You address some aspects of the explicit instruction topic • You understand some of the instruction, but there are gaps or missing parts in your written responses	• Your response is either totally irrelevant or incorrect • You make very little attempt to respond
Quality of Entries	• You always write in your notebook every day that it is assigned	• You usually write in your notebook every day that it is assigned	• You often write in your notebook every day that it is assigned	• You seldom write in your notebook every day that it is assigned
Reflection of Practice	• You always attempt deeper thinking in your writing • You related the information to your prior knowledge and studies in a relevant manner.	• You usually attempt deeper thinking in your writing • You usually relate the information to your prior knowledge and studies in a relevant manner	• Sometimes you attempt deeper thinking in your writing • You related the information to your prior knowledge and studies in a relevant manner.	• Your notebook has very little reflection about how this relates to prior knowledge or studies in education • You made very little attempt to respond.

Adapted from "Writer's Notebook Weekly Evaluation" by Isoke Nia and "Classroom Community 5-3-6's Writer Checklist"
http://www.readinglady.com/mosaic/tools/Reader'sResponseLogEvaluationRubricfromShelly.pdf

APPENDIX G:
READER'S RESPONSE RUBRIC

	Outstanding! A/4	Amazing! B/3	So-So C/2	Oops D/1
Writing Requirements	• Always writes to the prompt • Evidence of course material leaned demonstrated in writing	• Most of the writing requirements are included	• Some of the writing requirements are included	• Little of the writing requirements are included
Quality of Writing	• You always address all important aspects of the instructional topic • You always attempt deeper thinking in your writing • You address all important aspects of the prompt • You relate the prompt to your prior knowledge and previous education courses	• You address most important aspects of the instructional topic • You usually attempt deeper thinking in your writing • You usually address all important aspects of the prompt • You usually relate the prompt to your prior knowledge and previous education courses	• You address some aspects of the instructional topic • You understand some of the instruction, but there are gaps or missing parts in your written responses • You sometimes relate the prompt to your prior knowledge and previous education courses	• Your response is either totally irrelevant or incorrect • You make very little attempt to respond
Quality of Entries	• You always write in your notebook every day that it is assigned	• You usually write in your notebook every day that it is assigned	• You often write in your notebook every day that it is assigned	• You seldom write in your notebook every day that it is assigned
Discussion	• You always actively participate by contributing and listening to your peers • Comments are relevant and reflect understanding and assigned readings • Comments help to move the conversation forward	• You usually actively participate by contributing and listening to your peers • Comments are usually relevant and reflect understanding and assigned readings • Comments usually help to move the conversation forward	• You sometimes actively participate by contributing and listening to your peers • Comments are sometimes relevant and reflect understanding and assigned readings • Comments sometimes help to move the conversation forward	• You made very little attempt to participate by contributing and listening to your peers • Comments are rarely relevant and reflect understanding and assigned readings • Comments rarely help to move the conversation forward

Adapted from "Writer's Notebook Weekly Evaluation" by Isoke Nia and "Classroom Community 5-3-6's Writer Checklist"
http://www.readinglady.com/mosaic/tools/Reader'sResponseLogEvaluationRubricfromShelly.pdf

APPENDIX H:
REFLECTIONS INTERACTIVE NOTEBOOK FIDELITY CHECKLIST

Number of Students in Group: _____   Date: _____

Lesson Number: _____   **Start and Stop Time:** _____

Total Time of Observation: _____

2 **High Level of Implementation**	1 **Inconsistent Level of Implementation**	0 **Low Level of Implementation**

Lesson	Name Explicit Skill(s) Taught	Pacing (minutes)	Delivery
1			
2			
3			
4			
5			
6			
7			

Preparation	Materials Ready	Materials Not Sequential	Materials Gathered At the Last Minute
Pacing	• Lessons begin promptly • Each lesson ends in allotted time	• Lesson begins promptly, but time is lost in transition between some activities	• Late start • Some lessons are over maximum time
Delivery (Follows lesson)	• Lesson follows format of explicit instruction, practice time for pre-service teachers to respond using explicit instruction, and reflection/ discussion period given	• Usually follows format of explicit instruction, practice time for pre-service teachers to respond using explicit instruction, and reflection/discussion period given	• Usually does not follow format of explicit instruction, practice time for pre-service teachers to respond using explicit instruction, and reflection/discussion period given

Comments:

APPENDIX I
READER'S RESPONSE FIDELITY CHECKLIST

Number of Students in Group: _____ Date: _____
Lesson Number: _____ **Start and Stop Time:** _____
Total Time of Observation: _____

2 **High Level of Implementation**	1 **Inconsistent Level of Implementation**	0 **Low Level of Implementation**

Lesson	**Provided Prompt Used**	**Pacing (minutes)**	**Delivery**
1			
2			
3			
4			
5			
6			
7			

Preparation	**Materials Ready**	**Materials Not Sequential**	**Materials Gathered At the Last Minute**
Pacing	• Reader's Response time begins promptly • Each lesson ends in allotted time	• Reader's Response time begins promptly, but time is lost in transition between some activities	• Late start • Some sessions are over maximum time
Delivery (Follows lesson)	• Reader's Response time follows format of students writing to the prompt, and reflection/discussion period given	• Reader's Response time usually follows format of students writing to the prompt, and reflection/discussion period given	• Usually does not follow format of Reader's Response time

Comments:

APPENDIX J
WRITING PROMPTS FOR READER'S RESPONSE

Week	Literacy Skills	Prompts
1	**Phonemic Awareness**	What is phonemic awareness? Why do children need to be phonemically aware? How can teachers and parents ensure students are phonemically awareness?
2	**Phonics**	How do teachers teach phonics? Which phonics concepts are most important for children to learn?
3	**Fluency**	How do children become fluent readers and writers? Why is fluency important? What methods can teachers use for fluency practice with their students?
4	**Vocabulary**	How do children learn vocabulary? How do teachers teach vocabulary? What is the connection between vocabulary knowledge and comprehension?
5	**Specific Word Instruction**	Why should teachers use specific word instruction? What are some methods for teaching specific words?
6	**Comprehension**	What factors affect children's comprehension? Which comprehension strategies do readers and writers learn? How can teachers effectively teach comprehension?
7	**Writing**	What are the stages in the writing process OR what are the six traits of writing? How can teachers teach using this process of writing (either stages of writing or six traits of writing). Are there any books (trade or nonfiction) that you can use to teach writing? How can these books assist in helping you to teach literacy?
8	**Balanced Literacy Program**	What is a balanced literacy program? How does it differ from bottom up or top down approaches? What activities would you have students do or would you guide them in during a 90-minute reading block?

Adapted from: Tompkins, G. (2010). *Literacy for the 21st century.* Boston: Pearson.

APPENDIX K:
MANOVA and Descriptive Statistics Tables

K1. Descriptive Statistics

Descriptive Statistics

	N	Minimum	Maximum	Mean		Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Statistic	Std. Error	Statistic	Std. Error
Beliefs1	65	26.00	4.90E1	3.6954E1	5.93406E-1	4.78419	.132	.297	.191	.586
Knowle1	65	11.00	1.41E2	9.9431E1	2.88697E0	23.27550	-1.107E0	.297	2.326E0	.586
SelfEf1	65	.00	3.20E1	2.4123E1	7.88593E-1	6.35784	-1.816E0	.297	4.837E0	.586
Beliefs2	65	36.00	5.20E1	4.4631E1	6.21556E-1	5.01114	.026	.297	-1.256E0	.586
Knowle2	65	72.00	1.52E2	1.2128E2	2.14583E0	17.30021	-.104	.297	-2.327E-1	.586
SelfEf2	65	19.00	3.20E1	2.9031E1	3.92826E-1	3.16706	-1.073E0	.297	.825	.586
Valid N (listwise)	65									

K2. Box's Test of Equality of Covariance Matrices

Box's M	84.016
F	4.458
df1	18
df2	44414.238
Sig.	.000

K3 and K4. Pre- and Post-Test Descriptive Statistics for Reflections Interactive Notebook and Reader's Response Journals

Pre-Test for Reflections Group				Post-Test for Reflections Group				
Literacy Activity	N	Sum	Mean	SD	Literacy Activity	N	Sum	Mean	SD
Alpha	39	5.00	.128	.338	Alpha	38	2.00	.052	.226
PA	39	12.00	.307	.467					
Phonics	39	12.00	.307	.455	Phonics	38	25.00	.657	.480
Vocab	39	11.00	.238	.426	Vocab	38	23.00	.605	.495
Comp	39	9.00	.153	.365	Comp	38	21.00	.153	.365
Read Aloud	39	6.00	.333	.477	Read Aloud	38	28.00	.333	.477
Guided	39	13.00	.102	.037	Guided	38	17.00	.102	.307
Fluency	39	2.00	.051	.223	Fluency	38	17.00	.051	.223
Writing	39	16.00	.410	.498	Writing	38	14.00	.410	.498
Independ. Read	39	12.00	.307	.467	Independ. Read	38	14.00	.307	.467
Strategies	39	10.00	.256	.442	Strategies	38	18.00	.256	.442
Shared	39	17.00	.435	.502	Shared	38	16.00	.435	.502
Dictation	39	2.00	.051	.223					
Sight Words	39	6.00	.153	.153	Sight Words	38	2.00	.153	.365
Centers	39	3.00	.076	.076	Centers	38	5.00	.076	.269
Review	39	1.00	.026	.025	Review				
Wrap-up	39	2.00	.051	.223	Wrap-up				
Grammar	39	1.00	.025	.160	Grammar				
Worksheet	39	3.00	.076	.269	Worksheet				

Pre-Test for Reflections Group				Pre-Test for Reflections Group				
Literacy Activity	N	Sum	Mean	SD	Literacy Activity	N	Sum	Mean	SD
Whole Class Novel	39	1.0	.025	.160					
Spelling	39	3.00	.076	.269	Spelling	38	2.00	.052	.226
Text Reading	39	5.00	.128	.338	Text Reading	38	1.0	.263	.162
Discussion	39	7.00	.179	.388	Discussion	38	5.00	.131	.342
Giving instructions	39	3.00	.076	.269					
					Assessment	38	1.00	.026	.162
					Text how to	38	1.00	.026	.162
					Journals	38	6.00	.157	.369
					Inferencing	38	1.00	.026	.162
					Predictions	38	3.00	.078	.273
					Word Sorts	38	3.00	.078	.273
					Visualizing	38	5.00	.131	.342
					Interactive Writing	38	10.00	.263	.446
					Push and Say	38	3.00	.078	.273
					SWBS Summary	38	4.00	.105	.311
					Reader's Theater	38	3.0	.078	.273
					Repeated Readings	38	4.00	.105	.311
					Songs/ Rhymes	38	3.00	.078	.273

Pre-Test for Reflections Group				Pre-Test for Reflections Group				
Literacy Activities	N	Sum	Mean	SD	Literacy Activities	N	Sum	Mean	SD
					GIST Summary	38	1.00	.026	.162
					Echo/Choral	38	3.00	.078	.273
					VocabStrats	38	6.00	.157	.369
					Reflections	38	1.00	.026	.162
					Make Connections	38	1.00	.026	.162
					Questioning	38	2.00	.052	.226
					Collaborative	38	1.00	.026	.162
					KWL	38	5.00	.131	.342
					Word Families	38	4.00	.105	.311
					Rewrite Text	38	1.00	.026	.162
					Research	38	1.00	.026	.162
					Think Alouds	38	2.00	.052	.226
					QAR	38	1.00	.026	.162
					2QAR	38	10	.026	.162
					Text-how to	38	1.0	.026	.162
					Prior Knowledge	38	2.0	.026	.162
					Jigsaw Read	38	2.0	2.0	.162
					Socratic Seminar	38	2.0	2.0	.162

Pre-Test for Reader's Response					Post-Test for Reader's Response				
Literacy Activity	N	Sum	Mean	SD	Literacy Activity	N	Sum	Mean	SD
Alpha	26	2.00	.076	.271	Alpha	26	2.00	.076	.271
PA	26	4.00	.153	.367	PA	26	15.00	.576	.503
Phonics	26	6.00	.230	.429	Phonics	26	11.00	.423	.503
Vocab	26	10.00	.384	.496	Vocab	26	11.00	.423	.503
Comp	26	6.00	.230	.429	Comp	26	12.00	.461	.508
Read Aloud	26	10.00	.384	.496	Read Aloud	26	9.00	.364	.485
Guided	26	3.00	.115	.325	Guided	26	4.00	.153	.367
Fluency	26	1.00	.038	.196	Fluency	26	2.00	.076	.271
Writing	26	2.00	.076	.271	Writing	26	7.00	.269	.452
Independent	26	7.00	.269	.452	Independent	26	5.00	.192	.401
Strategies	26	2.00	.076	.271					
Shared	26	7.00	.269	.452	Shared	26	7.00	.269	.452
Dictation	26	2.00	.076	.271					
Sight Words	26	2.00	.076	.271	Sight Words	26	1.00	.028	.196
Centers	26	1.00	.038	.196	Centers	26	7.00	.269	.452
Review	26	1.00	.038	.196					
Wrap-up	26	1.00	.038	.196					
Use of WhiteBoards	26	1.00	.038	.196					
Grammar	26	1.00	.038	.196					
Worksheets	26	1.00	.038	.196					
Whole-Class Novel	26	1.00	.038	.196	Whole-Class Novel	26	1.00	.028	.196

Pre-Test for Reader's Response					Post-Test for Reader's Response				
Spelling		1.00	.038	.196	Spelling	26	3.00	.115	.325
Text Reading	26	1.00	.038	.196	Text Reading	26	1.00	.028	.196
Story Telling	26	1.00	038	.196					
Assessment	26	1.0	038	.196	Assessment	26	1.00	.028	.196
Basal	26	1.0	038	.196					
Video	26	1.0	038	.196					
					Journals	26	6.00	.230	.429
					Morning Message	26	1.00	.028	.196
					Basal Series: Imagine It	26	2.00	.0769	.271
					KWSL	26	1.00	.028	.196
					Writer's Workshop	26	2.00	.0769	.271

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BIOGRAPHICAL SKETCH

Susan Densmore-James knew from the time she was 8 that she wanted to be a teacher. Following in her grandmother Iris Cleo's footsteps, although her "first" classroom consisted of a mouse, turtle, and a chalkboard, she began her first official teaching job directly after college. Her career has spanned 20 years as first a student teacher at San Diego State University in California, grades 2, 4, and 5. Upon returning to her hometown of Gulf Breeze, Florida, Ms. Densmore-James began her career as a middle school English teacher, traveling around the United States to such places as Northern Virginia, North and South Florida, South Texas, New Orleans, San Diego, and Toronto, Canada, and was greatly influenced by the best educators around the U.S. The diverse groups of students with whom she worked were the driving force in her interest in working with struggling readers. This led her to obtain a Masters in Reading at the University of West Florida and continue on to become a Reading Specialist at her alma mater, Gulf Breeze High School. Although teaching K-12 is a passion, her time as an instructor at the University of West Florida inspired her to work towards a PhD in the two areas she loves most: Language Arts and reading. It is her hope to inspire pre-service teachers to become not only artists but also researchers in the area of literacy in order to give voices to those students forgotten by an educational system that may not meet the needs or understand ALL students.